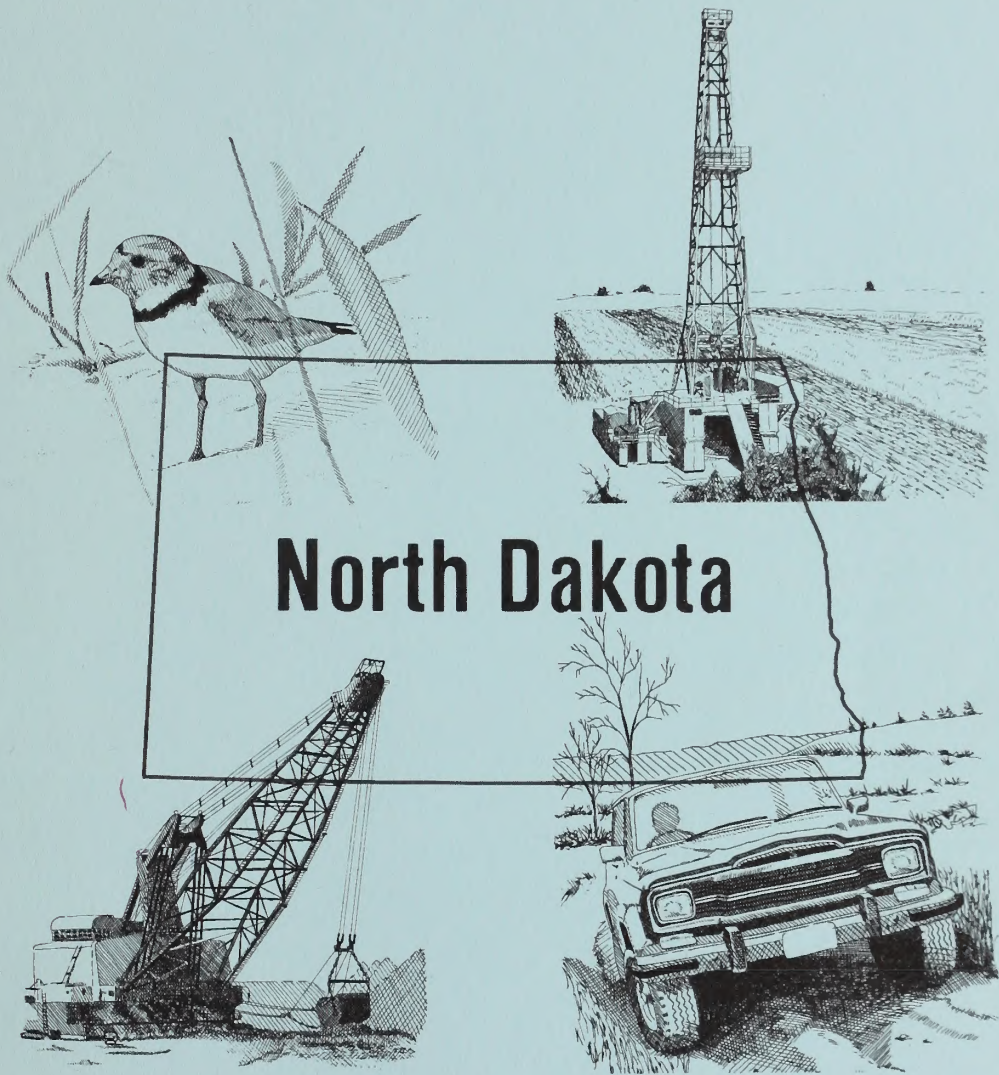


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NORTH DAKOTA
RESOURCE MANAGEMENT PLAN

Dickinson District Office
Bureau of Land Management
Department of the Interior

July 1988

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CHAPTER ONE

INTRODUCTION

This document establishes the North Dakota Resource Management Plan (RMP) and outlines procedures for using it. The RMP has been prepared in accordance with the Federal Land Policy and Management Act (FLPMA) and the Bureau of Land Management's (BLM) planning regulations, 43 CFR 1600.

The North Dakota RMP provides a single comprehensive land use plan for all BLM resource management responsibilities in the state. This master plan establishes the resource condition objectives, allocation of public land resources to various uses, and specific methods of managing those resources. Management decisions presented in this plan will remain in effect until the plan is amended, revised or replaced by a new plan. If significant changes occur in the proposed land uses of the planning area the RMP will be amended or revised.

This RMP replaces all management direction established in the four Management Framework Plans completed for BLM-administered resources in North Dakota during the late 1970s and early 1980s. In addition, the RMP replaces management decisions made following the development of the North Dakota Grazing Environmental Impact Statement (NDGEIS) and the Dickinson District Oil and Gas Environmental Assessment (EA).

TABLE 1

FEDERAL OWNERSHIP OF SURFACE, COAL, AND OIL AND GAS ESTATES WITHIN NORTH DAKOTA¹

Federal Agency	Coal Acres ³	Surface Acres ²	Oil and Gas Acres ³
Bureau of Land Management	4,200,000	67,247	460,394
U.S. Forest Service		1,105,545	963,285
Bureau of Reclamation		10,089	1,388
U.S. Fish and Wildlife Service		417,138	8,371
Army Corps of Engineers		559,077	9,807
U.S. Air Force		12,347	0
Bureau of Indian Affairs		762	0
National Park Service		71,057	10,444
TOTALS	4,200,000	2,243,586	1,453,689

¹ Agencies with minor ownership not included. Other categories of mineral ownership (e.g., acquired minerals, all minerals, restricted minerals) are not listed.

² Public Land Statistics 1984, BLM figure modified to reflect recent land pattern adjustment.

³ BLM Dickinson District Inventory Record. Includes all oil and gas rights administered by BLM and USFS and on Public Domain Lands of other agencies.

DESCRIPTION OF THE PLANNING AREA

This document provides management direction for all public lands and federal minerals in North Dakota for which the BLM is the sole management agency. A total of about 67,500 acres of public land is located in North Dakota, primarily in Dunn and Bowman Counties. Most of the public lands in these two counties are situated in two major blocks, the Lost Bridge area and the Big Gumbo area. The remaining public lands are situated in small, isolated tracts scattered throughout the state.

There are approximately 5.8 million (MM) acres of federally-managed minerals in North Dakota. Federal minerals are located under surface lands managed by various federal agencies, including the BLM, the U.S. Forest Service, and the U.S. Corps of Engineers (Table 1). Federal minerals are also located under state or privately-owned surface. This RMP establishes management strategies for federal minerals located under BLM-administered surface and under private lands not situated within the administrative boundaries of other federal land management agencies with the exception of portions of Dunn County located within the administrative boundary of Little Missouri National Grasslands. Land use planning for federal minerals located within the administrative boundaries of other federal agencies (approximately 1 MM acres) is conducted by the appropriate surface managing agency.

This plan considers approximately 4.8 MM acres of federal minerals. Most of this acreage is located in the western one-half of the state. The bulk of this total mineral acreage, approximately 4.2 MM acres, is federal coal reservation only. An additional 460,394 acres are federal oil and gas reservation only, and the remaining federal minerals are made up of all minerals, coal and oil and gas only, or other combinations.

THE PLANNING PROCESS

The BLM resource management planning process followed in developing this RMP has nine steps:

Step 1. Identification of Issues

Resource management concerns, conflicts, and opportunities that can be resolved through the planning process are identified. This process is called scoping and involves public participation.

Step 2. Development of Planning Criteria

Information needed to resolve issues, formulate and evaluate alternatives, and select the preferred alternative is identified. The criteria are circulated for public review.

Step 3. Collection of Inventory Information

Data needed to resolve resource issues and other environmental, social, and economic concerns are collected.

Step 4. Analysis of the Management Situation

Current situation is assessed, and a baseline for development of a RMP is provided. A Management Situation Analysis (MSA) document is produced that describes the physical situation, current management guidance, and resource problems and opportunities. The MSA is generally a reference document only and is not distributed to the public.

Step 5. Formulation of Alternatives

Several complete, reasonable resource management alternatives are prepared. A required "no action" alternative describes present management whereas other alternatives place emphasis on different management themes.

Step 6. Analysis of Impacts of Alternatives

The physical, biological, economic, and social impacts of implementing each alternative are analyzed.

Step 7. Selection of the Preferred Alternative

Impacts of each alternative are compared and the preferred alternative is selected. The interdisciplinary process used in steps five through seven is documented in a draft RMP/EIS and circulated for public review.

Step 8. Selection of the Resource Management Plan

Public comments are analyzed and the alternatives are modified as appropriate to provide a basis for the management plan. The proposed RMP and final EIS is distributed to the public in the final RMP/EIS document. A 30-day protest period is allowed before the RMP is adopted. A Record of Decision is published after a consideration of any protests.

Step 9. Monitoring and Evaluation

Resource conditions are monitored and evaluated as the plan is implemented. If monitoring shows that resource issues are not being satisfactorily resolved or that the desired results outlined by the RMP are not being met, the plan may be amended or totally revised.

Coal Planning

In addition to the BLM planning process, there are four land use planning requirements of the federal coal management regulations (43 CFR 3420.1-4). Prior to the leasing of federal coal, the following four screens must be applied during land use planning:

- (1) Identification of areas with coal development potential,
- (2) Application of the 20 unsuitability criteria (43 CFR 3461.1),
- (3) Identification of multiple-use tradeoffs, and
- (4) Identification of significant surface owner opposition to the surface mining of federal coal.

Based on the application of these four screens, lands acceptable for further consideration for the leasing of coal are determined. The decisions to lease and allow mining are not made during the development of a RMP but are further analyzed through detailed environmental analysis following land use planning.

SUMMARY OF PUBLIC INPUT

Public participation occurred at four major steps during the preparation of this final RMP/EIS:

- (1) Scoping or Identification of Issues,
- (2) Development of Planning Criteria,
- (3) Surface Owner Consultation, and
- (4) Public Review of Draft RMP/EIS.

Public participation activities conducted during each of these steps are discussed below.

Scoping or Identification of Issues

Public participation activities for the North Dakota RMP/EIS began with the December 19, 1984, Federal Register Notice announcing the intent to initiate planning activity. This notice of intent also invited the public to suggest resource management issues to be considered and included a call for coal resource information. A news release requesting similar public input was issued to media throughout North Dakota December 20, 1984. A supplement to the notice of intent identifying the four alternatives considered in the RMP/EIS was published in the February 28, 1986, Federal Register.

A brochure describing the BLM planning process, opportunities for public input, and anticipated planning issues was mailed to approximately 300 persons, groups, or agencies during February and March of 1985. This brochure included a return mailer for suggesting issues to be considered in the plan. The Dickinson District received 33 responses to the brochure.

Five public meetings were held during March and April of 1985 to aid in identifying issues and planning criteria. The scoping meetings were held in Bowman, Dickinson, Hazen, Towner, and Williston, North Dakota. A total of 38 persons attended. News releases announcing the meetings and requesting suggested issues were issued to media servicing the general area surrounding the meeting locations.

Development of Planning Criteria

On July 10, 1985, a news release was issued to selected news media throughout North Dakota announcing the availability of issues and planning criteria. The issues and planning criteria were available for a 30-day comment period ending August 14, 1985. Two comments were received.

Surface Owner Consultation

Beginning in December 1985, 1,844 surface owners over federal coal were consulted regarding their preference towards coal mining. Three public open houses were held during December 1985 to answer questions regarding the consultation process. Two news releases were issued to announce the consultation process, open houses, and deadlines for response. These news releases were issued to media located in proximity to the CSAs and major population centers within the state (Appendix A, Table A-6).

Public Review of Draft RMP/EIS

Copies of the draft RMP/EIS were provided to approximately 429 persons, groups, local governments, and agencies that expressed interest in the management of public lands and minerals in North Dakota. The mailing list was compiled using names and addresses of: (1) parties actively involved in past planning and environmental analysis activities, (2) parties responding to our call for suggested issues and resource information, (3) parties requesting further information or copies of the RMP/EIS during the preparation of the plan, (4) agencies, governments, and corporations potentially affected by the plan, and (5) agencies, groups, and tribes consulted during preparation of the RMP/EIS.

The draft RMP/EIS was available for public review and comment December 22, 1986, through March 25, 1987. A total of 36 parties provided written comments on the draft during the comment period. Four public meetings were held in January and February 1987, to discuss the draft RMP/EIS and to obtain public comments. Meetings were held in Dickinson, Williston, Hazen, and Bowman, North Dakota. A total of 43 persons attended. The comments and BLM's responses to them are presented in the final RMP/EIS. The subjects of those comments that appeared most frequently or will require additional consideration during implementation of the RMP are summarized below:

- (1) The RMP's use of multiple-use tradeoffs in applying the coal screens. Some believed BLM did not go far enough in meeting the Secretary of the Interior's pledge to give greater emphasis to multiple-use tradeoffs during coal planning, whereas others believed BLM was excessive in its use of multiple-use tradeoffs.
- (2) The RMP's use of the wildlife threshold concept.
- (3) Adequacy of data used for application of the coal screens.
- (4) Interest in maintaining or enhancing air quality in relation to mineral development. This topic was frequently mentioned.
- (5) Protection of groundwater in relation to mineral development.
- (6) Protection of surface owner rights during the coal leasing process. Land owners over Federal coal were concerned that they would not be contacted prior to leasing. Many persons mentioned that surface lease agreements may be allowed to expire before any Federal leasing takes place resulting in opportunities to refuse consent to leasing of Federal coal.
- (7) BLM's authority to use special oil and gas leasing stipulations in split estate situations. There was concern that these stipulations would unnecessarily hinder development and would interfere with landowner rights.
- (8) The protection provided to archaeological resources. Some believed BLM provided excessive protection whereas others stated that BLM should be commended for the recognition of the value of archaeological resources.
- (9) BLM should explore opportunities to transfer public lands to other resource management agencies or related interest groups before, or in place of, disposing of or exchanging lands.

- (10) Consideration of some areas for ACEC designation.
- (11) Protection of nature preserves, natural areas, and rare plants and animals.
- (12) Mineral development impacts on units of the National Park Service (especially visual impacts).
- (13) Stream segments identified in the Nationwide Rivers Inventory should be considered in future management proposals.
- (14) The land pattern adjustment program. Adjacent landowners should be given first priority in sales and exchanges.

Following release of the RMP and final EIS there was one protest to the plan. The protest questioned BLM's authority to include stipulations for the protection of surface resources when leasing Federal oil and gas located under private surface. The Director of BLM determined that BLM does indeed have the authority to use lease stipulations as a means of mitigating impacts to the environment in the case of split estate.

Public input into the planning process will continue throughout implementation of the RMP. Opportunities for public input will occur during the preparation of activity plans and site-specific environmental analyses. Also, coordination and consultation with other Federal agencies, state and local governments, and Indian tribes will be necessary for the implementation of many plan decisions.

ISSUES

The BLM planning process is issue driven. The development of management proposals is based on the issues identified through public input, resource monitoring and regulatory or policy mandate.

Four issues were identified during the scoping process for this RMP: Coal Leasing, Land Pattern Adjustment, Oil and Gas Leasing, and Off-Road Vehicle (ORV) Use Designations. Many related concerns identified through public comment have been included in the four basic issues.

Coal Leasing

The federal coal leasing process, opinions expressed by the public, and the principles of multiple resource management require that areas with potential for the leasing and development of federal coal be analyzed through a comprehensive land use plan and environmental analysis. Areas of federal coal will be screened for coal development potential, unacceptable environmental conflicts, and significant surface owner opposition to mining.

The four coal screens (43 CFR 3420.1-4) need to be applied to coal administered by the BLM in North Dakota except for areas underlying surface administered by other federal agencies. The application of the coal screens must include consideration of all resources included in the unsuitability criteria (43 CFR 3461) as well as other resources not specifically addressed by the criteria.

Land Pattern Adjustment

Small scattered and isolated tracts of Bureau-administered surface are often difficult or uneconomical to manage. Land pattern adjustments need to be made to enhance multiple-use management and to increase multiple resource values on public lands in the state.

Oil and Gas Leasing

The uncertain nature of the timing, location, and resource impacts of oil and gas development require that potential impacts be analyzed during the land use planning process and that appropriate measures be prescribed to ensure protection of significant resource values. Efficient development of federal oil and gas should be encouraged through the use of the least restrictive leasing stipulations necessary.

Oil and gas development potentially may cause impacts to habitats used by threatened or endangered species, migratory bird species of high federal interest, or wildlife species

of high interest to the state. Impacts can also occur to other important resources such as air and water quality. Appropriate lease stipulations necessary to avoid or mitigate impacts to these important resources need to be developed while ensuring that multiple use objectives are met.

Off-Road Vehicle Travel Restrictions

The BLM has been mandated by executive order (EO 11644) to study and designate Bureau-administered surface as either open, limited or closed to ORV uses.

Areas where ORV use may cause significant adverse environmental impacts need to be protected by appropriate use designations. These use designations can either close an area to ORV use or limit ORV use by restricting use to specific kinds of vehicles, season of year, or both. Areas where ORV use does not cause significant impacts to other resources or users need to be designated as open to ORV use to ensure the availability of ORV recreational opportunities.

CHAPTER TWO

USING THE PLAN

Now that the RMP is complete there are several actions that must take place to ensure proper use of the plan and protection of the time, money, and effort put into producing the plan. The required actions are: plan implementation, plan monitoring, plan maintenance, and plan modification.

PLAN IMPLEMENTATION

Plan implementation is the most critical part of the planning process. Effective use of this plan requires a systematic approach towards implementing each of the plan decisions. Implementation involves ranking of plan decisions, construction of an implementation schedule, budget and program development, and continued use of an interdisciplinary approach towards management. Tracking is an integral part of implementation.

PLAN MONITORING

Monitoring will be conducted on a regular schedule to determine the continuing effectiveness of the plan decisions. Monitoring allows recognition of situations that may require a modification of plan decisions. Effective plan monitoring and subsequent modification will extend the useful life of the RMP. Monitoring of the RMP allows the manager to:

- (1) Determine if a multiple-use prescription is accomplishing what was intended.
- (2) Determine if predicted effects of management were accurate.
- (3) Identify unanticipated effects of management.
- (4) Determine if prescribed mitigation is appropriate.
- (5) Determine if any thresholds identified in the RMP have been met or exceeded.
- (6) Continuously evaluate consistency with approved plans or programs of other federal agencies, state and local governments or Indian Tribes.

(7) Continuously analyze management tradeoffs and plan efficiency.

(8) Determine if changes in circumstances or new data have affected the plan, its conclusions, or the estimation of effects.

(9) Track the rate and degree to which the plan decisions are being implemented.

Plan monitoring will be budgeted for and carried out under the Multiple Use Planning program.

PLAN MAINTENANCE

Plan maintenance involves minor adjustments to the plan such as corrections of typographical errors, updates of data following resurvey, and changes in land status. Maintenance extends the life of the plan by accounting for minor changes in resource conditions or available information. Maintenance does not expand the scope or level of prescribed resource uses from those of the approved RMP. Plan maintenance does not require additional National Environmental Policy Act (NEPA) analysis.

PLAN AMENDMENT AND REVISION

Plan amendment and revision occurs when monitoring indicates a need for departure from the RMP decisions. This need may be the result of new circumstances such as a major change in legislation or regulations, or the identification of inappropriate management decisions. Amendment occurs when new circumstances or information require the addition of analysis or a revisiting of some decisions. Revision of the RMP occurs when major changes are necessary. It is more efficient to overhaul the plan and EIS than to simply amend the document. Plan amendment and revision do require additional NEPA analysis.

CHAPTER THREE

HOW TO IMPLEMENT THE PLAN

Effective use of the RMP requires a systematic approach to implementation. Implementation involves the entire process of budgeting, scheduling, on-the-ground work, and follow-up monitoring. The use of uniform procedures for implementation ensures that all key factors are considered and provides a method for accurate tracking of management activities and accomplishments.

WHAT MUST BE ESTABLISHED

Eight items must be considered for implementation of each plan decision:

- (1) Priorities for implementation,
- (2) Proposed schedule for implementation,
- (3) Budget implications,
- (4) Interaction with other plan decisions,
- (5) Necessary activity or project planning,
- (6) Necessary decision-specific National Environmental policy Act (NEPA) compliance,
- (7) Coordination and consultation needs, and
- (8) Required resource monitoring.

Priorities For Implementation

Priorities for implementing RMP decisions must be assigned both within and among programs. Priorities will be established through specialists' input and the District Manager's decision. RMP decisions will first be grouped into the general priority categories of "High," "Medium," and "Low." Use of the general categories will allow refinement of the decision priorities over the life of the plan and will provide a common reference for out-year budgeting and preparation of other long-range plans.

A detailed priorities list will be prepared each fiscal year as part of the Preliminary Annual Work Plan process. Generally there will be little refinement necessary from one year to the next. However, priorities must be reviewed to accommodate minor changes in circumstances such as projected budgets, weather conditions, cooperation by external parties, and supplemental funding.

Proposed Schedule for Implementation

The implementation schedule goes one step beyond the priorities list by establishing target dates for starts and completion of implementing each decision. The implementation schedule will serve as an overall guide to managers in scheduling their staff's work year. The schedule is also intended to serve a major role in tracking annual progress. In addition to programming staff, the schedule allows for advance scheduling of necessary equipment, procurement, coordination, and completion of planning and environmental documents.

Budget Implications

The RMP will be used as the primary vehicle for developing Preliminary Annual Work Plans (PAWP) as well as out-year budgets. Major portions of required budgets should be readily estimated using the combination of the priorities list and implementation schedule. Staff and support needs are identified during scheduling.

Decision Interactions

Review of the interaction among various planning decisions will be used throughout the ranking, scheduling, and budgeting process. Decision interactions can be helpful in identifying management actions that may complement each other, resulting in cost savings (e.g., combining adjacent range and wildlife land treatments). A review of the interaction among decisions is also necessary to avoid scheduling conflicts.

Additional Planning and NEPA Analysis Needs

The need for additional planning (i.e., activity or project plans) must be identified early in the implementation process to avoid costly delays and conflicts with other budget and staff requirements. Further planning activities then must be built into the implementation schedule. The need for further NEPA analysis should be reviewed concurrently with activity and project planning.

Further Coordination and Consultation Needs

Many of the RMP decisions were developed through close internal and external coordination and consultation. Coordination should continue into the implementation of the plan. Also, some plan decisions can only be implemented following formal consultation (e.g., Section 106 of the National Historic Preservation Act). Coordination and consultation needs should be identified during the early phases of developing the annual implementation schedule. Parties outside of the Dickinson District should be made aware of proposed implementation steps well in advance so that surprises and delays can be avoided.

Resource Monitoring

Prior to implementation of any RMP decision a "mini monitoring plan" should be developed. This plan is intended to identify the key elements to be monitored and the purpose of monitoring. These mini monitoring plans should complement the district-wide resource monitoring plan.

WHAT MUST BE DOCUMENTED

Plan implementation, monitoring, and maintenance must be documented within the Dickinson District Central Files.

Documentation will be in the form of separate files, monitoring and maintenance rosters, and additions or modifications to the District's Master RMP.

Plan Implementation

Implementation of the RMP decisions will be performed using an Implementation Worksheet (Appendix F). This worksheet may be modified by the District Manager as necessary.

The Implementation Worksheet is intended to provide a simple, comprehensive recordation system for all plan implementation. The worksheet provides a method for concisely documenting the plan decision, scheduling, decision interactions, staffing and support needs, necessary coordination and consultation, and monitoring targets. Use of the worksheet will ensure workload and budget planning early in the implementation process. Worksheets can be completed for each resource program's priority decisions during the PAWP process. At that time budget allocations, nondiscretionary workloads, and competing programs and projects can be compared to determine which decisions will be implemented or partially implemented during the fiscal year.

Plan Monitoring

All plan monitoring efforts and their results will be recorded on the Plan Monitoring Roster (Appendix G). Records must indicate which portions of the RMP were monitored, when the monitoring effort occurred, what the results of monitoring were, and what method of modification (if any) should be used to adjust the plan.

Plan Maintenance

Plan maintenance must be documented each time adjustments are made to the RMP. Documentation will be in the form of typed page inserts to be placed within the master copy of the RMP. In addition, all plan maintenance, including date, change(s) made, and reason for adjustment, will be entered on the RMP Maintenance Roster located at the start of the Master RMP (Appendix H). All plan maintenance should be brought to the attention of the district planning coordinator prior to making the necessary adjustments.

Plan Amendment and Revision

Plan amendment and revision will be documented in accordance with 43 CFR 1610.5-5 and 1610.5-6. The need for plan amendment or revision will be assessed based on the Plan Maintenance Roster and the listing of needed modifications maintained with the Master RMP.

CHAPTER FOUR

THE RESOURCE MANAGEMENT PLAN

The decisions presented in this chapter include all of the decisions analyzed under the Preferred and Proposed Alternatives in the draft and final EIS. The decisions have been reorganized here to allow quick reference. The wording of some plan decisions has been changed from the draft and final RMPs/EISs. Also included in this chapter are discussions of key public input used in developing the RMP, identification of resource monitoring goals and targets, and identification of anticipated support or coordination/consultation needs during the implementation of the plan.

Many of the decisions presented in the plan interact. Interactions occur where two or more resource concerns drive a decision or where one resource affects the management of another. The decisions are generally ordered by resource programs, however, due to interactions, there may be similar decisions presented under more than one program. Also, some decisions that guide overall management of natural resources within North Dakota and decisions not necessarily tied to any specific program (e.g., riparian area management) are presented under the title interdisciplinary resources.

The RMP and associated EIS process represent only the start of the interdisciplinary effort required for effective resource management. Interdisciplinary development of site-specific management proposals and environmental analyses will continue throughout implementation of the RMP. Identification of decisions that interact is key to successful use of the interdisciplinary concept. Prior to implementation of any decision, there should be a review of other related or affected plan decisions. A chart representing the interactions between the plan decisions is presented in Appendix G.

MAINTENANCE AND OPERATIONS

Maintenance and operation (M&O) activities are defined here as:

- (1) The minimum commitment required to protect investments in physical improvements and plans,
- (2) The minimum commitment required to preserve future resource options, and
- (3) The capability to provide public service in priority areas or programs.

M&O activities are established by the Montana BLM State Office (MSO) for all BLM management in Montana and the Dakotas. M&O is a policy statement that may be redefined outside of the planning process. The North Dakota RMP includes M&O as a decision for the management of all resources and programs. M&O activities will be given top priority in all budget decisions. In some cases M&O activities have also been included as separate plan decisions to give special emphasis to specific M&O actions through the planning process.

STANDARD OPERATING PROCEDURES

The North Dakota RMP was developed under the assumption that all on-the-ground management and projects would be consistent with standard operating and design procedures. Standard operating procedures are not defined in this document but are presented in Department, BLM, and Montana BLM manuals, handbooks, and other policy statements. Some decisions presented below may, however, partially overlap with standard operating procedures.

PLAN DECISIONS

The decisions presented below are ordered by resource programs or areas of emphasis. Programs and resources not listed will be managed according to standard operating procedures.

The decisions are broken into three separate categories: (1) objectives for resource condition and use, (2) allocation of resources or land use, and (3) management actions. Management actions are ordered by general priority for implementation unless stated otherwise. RMP decisions for the management of surface resources are directed toward manageable public lands.

Soil, Water and Air

Objectives for Resource Condition and Use

- (1) To maintain, restore, and/or enhance the quantity of water on all public lands.
- (2) To maintain or restore water quality to levels equal to or above legal standards.
- (3) To maintain soil productivity and promote sustained yields while keeping erosion at minimal acceptable levels and preventing physical or chemical degradation.
- (4) To reduce the risk of floodloss of buildings, soils and other resources and minimize the risk to human safety, health, and welfare by floodwaters.
- (5) To preserve the natural and beneficial values served by floodplains.
- (6) To maintain or enhance drainage stability.
- (7) To manage ground water to maintain the quantity and quality of aquifers.
- (8) To maintain air quality at a level equal to or better than national or state air quality standards.

Allocations of Resources or Land Use

- (1) Allow no surface coal mining activities through a multiple-use tradeoff screen on up to 79,478 acres of land with steep slopes (greater than 30 percent) over federal coal to protect it from excessive erosion.

(2) Limit ORV use on 22,164 acres in Big Gumbo area to periods of the year generally characterized by dry and stable soils (June 2 — February 28).

(3) Allow No Surface Occupancy (NSO) on up to 57,355 acres by oil and gas surface disturbing activities within 200 feet of wetlands, lakes and ponds to protect surface water and related vegetation.

(4) Allow NSO on up to 694.41 acres by oil and gas surface disturbing activities to protect the floodplain of the Missouri River from possible pollution.

Management Actions

(1) Complete all M&O activities established for the management of soil, water, and air resources in the Montana BLM system. These activities include:

- (a) water, air quality, and climate monitoring,
- (b) provision of air quality monitoring support to other M&O activities, and
- (c) maintenance of existing management developments.

(2) Assess potential impacts to air quality during the environmental analysis of specific management proposals such as coal activity planning and oil and gas permitting.

(3) Advise the proper regulatory agency, North Dakota State Department of Health (NDS DH), or the Three Affiliated Tribes if on the Fort Berthold Reservation, should analysis show the potential for any BLM-authorized action to exceed the Ambient Air Quality Standards (AAQS) and the Prevention of Significant Deterioration (PSD) standards.

(4) Include requirements for gas analyses, safety measures to be employed when H₂S is present, and gas flaring and/or venting restrictions as conditions of approval for all APDs for oil and gas.

(5) Review newly completed oil and gas wells to determine the feasibility of hook-up to a gas gathering system should air quality data from research projects, specific environmental documents, or ongoing monitoring indicate unacceptable air quality resulting from flaring.

(6) Review for compliance with the AAQS's new oil and gas wells that cannot be included in a gas gathering system and must, therefore, continue to flare.

(7) Require air pollution control devices or other mitigation and notify NDS DH if air quality standards are being exceeded by oil and gas wells that must flare.

(8) Analyze proposed surface-disturbing projects to determine suitability of soils to support or sustain such projects. Design projects to minimize soil loss. Management actions will be consistent with soil resource capabilities.

(9) Develop new sources of water on public lands, focusing on the Big Gumbo Area. Methods that will be used include snow management, pothole blasting, and/or reservoir excavation.

(10) Implement Best Management Practices to the extent practical under the National Nonpoint Source Policy.

(11) Participate with state and federal agencies in water quality planning (Section 208, of the Clean Water Act of 1977) to prevent degradation of water quality.

(12) Apply oil and gas lease stipulations on up to 151,957 acres of riparian habitat so that no disturbance of riparian areas of wetlands, intermittent, ephemeral, or perennial streams and rivers will be allowed except for essential road and utility crossings.

(13) Apply special coal lease stipulations during site-specific analysis on up to 12,318 areas of buried valley aquifers to protect their integrity.

(14) Adjust land patterns on up to 34,454 acres to improve manageability, allowing control of water yields, improvement in water quality, and a decrease in erosion and sedimentation.

(15) Give high relative weight to retaining or acquiring lands where the potential exists for intensive management through activity planning (e.g., AMP, HMP, Watershed Management Plans.)

(16) Give high relative weight to disposing of lands that lack management opportunities due to movement of river channels and periodic flooding.

(17) Give high relative weight to retaining or acquiring lands that are located along the Little Missouri River, Missouri River, or major tributaries but are not threatened by channel movement.

(18) Give moderate relative weight to retaining or acquiring lands containing wetlands that serve as ground water recharge areas and have potential to be drained if disposed.

(19) Give moderate relative weight to retaining lands that possess value for reduction of sediment or other pollutants that could be lost if disposed.

(20) Give moderate relative weight to retaining or acquiring lands located in 100-year floodplains where management opportunities exist.

(21) Give low relative weight to disposing of lands inundated by water.

Oil and Gas

Objectives for Resource Condition and Use

(1) To encourage development of the Federal oil and gas resource while avoiding unnecessary impacts to other resources and land uses.

(2) To maintain the integrity of federal oil and gas reserves to facilitate efficient and reasonable development.

Allocation of Resources or Land Use

(1) Make available for leasing, under Montana BLM Standard Stipulations, 253,583 acres of Federal oil and gas.

(2) Make available for leasing, under necessary special stipulations and Montana BLM Standard Stipulations, 206,811 acres of Federal oil and gas.

Management Actions

(1) Manage the oil and gas program to at least the minimum acceptable levels addressed in the "Maintenance

and Operations” as established for the Montana Organization. These include a number of items relating to the timely processing of various leases, permits, and applications and the inspection of facilities.

The following management actions will be implemented in no particular priority order:

(2) Review all lands (206,811 acres) that fall within identified resource concern areas (Map 4) and attach necessary oil and gas stipulations.

(3) Process APDs and Sundry Notices according to the terms and stipulations of the lease. Attach additional stipulations to protect sensitive resources or human health.

(4) Fulfill the responsibilities established by interagency and other cooperative agreements such as the 1984 BLM/USFS MOU for oil and gas operations within the administrative boundaries of the Little Missouri National Grasslands.

(5) Assess impacts to air quality in an environmental analysis for specific management proposals, e.g., permitting or oil and gas development.

(6) Include specific conditions of approval for APDs for the protection of air quality.

(7) Review newly completed wells to determine feasibility of hook-up to a gas gathering system if research, analyses, and monitoring indicate unacceptable air quality results from their flaring.

(8) Require mitigating measures on oil and gas wells that cannot be included in a gas gathering system and notify the NDS DH.

(9) Assign priority for inspections of wells by using levels of production, past compliance records, and health and safety requirements, environmental protection, and possible royalty loss.

(10) Exchange the mineral estate with the surface estate if the land does not contain known minerals.

(11) Consider exchange of other minerals (leasable and salable) on a case-by-case basis.

(12) Manage lands and minerals returned to BLM administration through withdrawal revocation and R&PP patent reversion or acquired through gifts or exchanges by the objectives, resource allocations, and decisions given in this plan.

(13) Construct new roads and reconstruct all or portions of existing roads in a manner minimizing surface disturbance with limit of one main road to each facility, using the guidelines and stipulations given in leases and other authorizations, “Surface Operating Standards for Oil and Gas Exploration and Development”, and Handbook H-2801-1.

Coal

Objectives For Resource Condition and Use

(1) To encourage orderly development of the federal coal resource while avoiding unnecessary impacts to other resources and land uses.

Allocation of Resources or Land Use

(1) Make 573,868 acres available for further consideration for coal leasing for surface mining.

(a) A total of 1,009,648 acres located in 24 CSAs were identified as having coal development potential.

(b) Application of the unsuitability criteria eliminated 193,382 acres from further study.

(c) An additional 154,555 acres were dropped from further consideration under the application of the multiple-use tradeoff screens (25,305 acres under wildlife threshold).

(d) The surface owner consultation screen eliminated 87,843 acres from further consideration due to significant surface owner opposition to mining.

Management Actions

(1) Complete all M&O activities established for coal management in the Montana BLM system. These activities include:

(a) Activity planning for lease by application, including emergency lease applications,

(b) Exploration licenses and plans,

(c) Readjustments,

(d) Relinquishments, and

(e) Mine plan reviews.

(2) Fully assess resources such as air quality, threatened and endangered species, and cultural resources, that could not be analyzed in detail during land use planning, at the time of site-specific analysis.

(3) Complete NEPA compliance for all coal tracts prior to leasing through site-specific analyses.

(4) Review, in cooperation with the National Park Service (NPS), federal coal tracts identified within the viewshed of NPS units (36,225 acres) to determine mitigation measures necessary for protection of visual qualities of the NPS units.

(5) Review up to 12,318 acres of buried valley aquifers during site-specific analysis to determine where special coal lease stipulations are necessary and justified to protect their integrity.

(6) Review up to 150,380 acres of federal coal lands during site-specific analysis to determine whether special vegetative reclamation stipulations are necessary on any or all of these lands to ensure restoration of important habitat.

Mineral Materials and Locatable Minerals

Objectives for Resource Condition and Use

(1) To maintain the availability of federally-reserved locatable, salable, and non-energy leasable minerals for authorized uses.

(2) To maintain the integrity of federally-reserved locatable, salable, and non-energy leasable minerals for future authorized uses.

Allocation of Resources or Land Use

- (1) All the federally-reserved saleable and non-energy leasable mineral deposits are available for application.
- (2) All the federally-reserved locatable mineral deposits, excluding acquired minerals and minerals that are withdrawn to protect resource values and uses, are open to mineral entry.

Management Actions

- (1) Manage the locatable, saleable, and non-energy leasable minerals program to at least the minimum acceptable levels addressed in the M&O as established for the Montana BLM organization. M&O activities include:
 - (a) receiving and processing mineral material and mineral patent applications, and
 - (b) conducting necessary appraisals.
- (2) Manage lands and minerals returned to BLM administration through withdrawal revocation and R&PP patent reversion or acquired through gifts or exchanges by the objectives, resource allocations, and decisions given in this plan.
- (3) Monitor mineral development activities.
- (4) Resolve unauthorized use.

Grazing Management

Objectives for Resource Condition and Use

- (1) To maintain or improve range conditions on all manageable allotments.
 - (a) Improve unsatisfactory range condition on (I) category allotments.
 - (b) Maintain satisfactory range condition on (M) and (C) category allotments. (Satisfactory condition is defined as approaching or exceeding 75 percent of site potential in productivity.)
- (2) To control noxious weed invasions where feasible.
- (3) To manage livestock grazing in a way that will complement multiple resource use.

Allocation of Resources or Land Use

- (1) Grazing will continue on the AMP allotments during activity plan revision.
- (2) Grazing will be allowed on all lands identified as suitable (approximately 56,400 acres).
- (3) Allocate up to an estimated 11,172 AUMs to livestock in the long term. (Livestock use is set at 25 percent of average annual forage production.)
- (4) Present livestock use levels will continue unless monitoring provides evidence for necessary adjustments.
- (5) Unleased lands identified as suitable for grazing will be leased.
- (6) Lands identified for disposal or exchange and not presently leased for grazing will be made available for grazing using nonrenewable leases.

Management Actions

- (1) Complete all M&O activities defined for the Montana BLM system. These activities include:
 - (a) revision of I category AMPs as required,
 - (b) monitoring of allotments,
 - (c) administration of leases and cooperative agreements,
 - (d) supervision of use, and
 - (e) prevention of spread or introduction of noxious weeds.
- (2) Place range improvement budget priority on Category M and I allotments and control of leafy spurge.
- (3) Prepare or participate in the preparation of activity plans. Activity plans will be prepared for or revised where necessary based on:
 - (a) monitoring results indicating need for adjustments in class, season, and extent of use,
 - (b) need for protection of riparian areas,
 - (c) need for control of noxious weed infestations where control efforts are taking place on adjacent lands,
 - (d) need for and opportunities for land treatments or range developments to facilitate range management, and
 - (e) acquisition of manageable blocks of public land through the land pattern adjustment program.
- (4) Implement grazing systems where necessary as determined from monitoring results.
- (5) Water sources will be developed where needed (as indicated by monitoring) to improve livestock distribution and wildlife habitat. Development of range improvements on erodible soils will be avoided during the period April through June.
- (6) Waters necessary for wildlife and adversely affected by uncontrolled livestock use will be fenced. Gaps will be provided for livestock use. Development of range improvements on erodible soils will be avoided during the period April through June.
- (7) Management fences will be constructed where necessary to support grazing systems or treatments. All fences will be designed to protect and/or benefit wildlife. Development of range improvements on erodible soils will be avoided during the period April through June.
- (8) Modify existing fences that adversely affect big game populations by restricting movements. (Twelve miles of fence were identified for modification in NDGEIS.)
- (9) Control noxious weed infestations where feasible as determined by extent of infestation, control on adjacent lands, and lessee cooperation. Biological control methods, including livestock management, will be considered if proven effective. (Leafy spurge was identified as primary concern in NDGEIS.)

(10) Monitoring will be conducted to assess actual use, utilization, climate, range condition, trend, and unauthorized use.

(11) Review land exchange and disposal actions for effect on range management activities. High relative weight will be placed on acquiring or retaining parcels suitable for effective range management. Low relative weight will be placed on reducing the number grazing leases through land pattern consolidation.

(12) Existing leases on lands identified for disposal or retention will be renewed for two-year terms.

(13) Review allotment categorizations (Improve, Maintenance, Custodial) as circumstances change and new data become available. Categorizations may be changed consistent with BLM range management policy.

(14) C category allotments will normally be managed under deferred or seasonal systems. Management of small parcels will be coordinated with private landowner's (lessee's) management.

(15) Conduct land treatments where outlined in activity plans as necessary for effective range management. (600 acres were tentatively identified for treatments in NDGEIS.)

Wildlife Habitat Management

Objectives for Resource Condition and Use

(1) To maintain or improve breeding habitat and/or nest sites for Threatened or Endangered Species and migratory birds of high federal interest.

(2) To protect sites with rare plant and animal populations, exemplary natural communities, and areas designated under the state natural area registry program from adverse impacts.

(3) To improve nesting and winter habitat for sage grouse.

(4) To maintain or improve habitat for big game, especially pronghorn, elk, and bighorn sheep.

Allocation of Resources or Land Use

(1) About 148,045 acres will be excluded from further consideration for the leasing or exchange of coal due to wildlife unsuitability criteria 11, 13, 14, and 15.

(2) About 25,305 acres of important wildlife habitat will be excluded from coal mining under the Wildlife Threshold concept pending joint review by USFWS, NDGFD, and BLM.

Management Actions

(1) Complete all M&O activities established for wildlife management in the Montana BLM system. These activities include:

- (a) Identification and monitoring of Threatened and Endangered Species habitats,
- (b) Maintenance of existing data bases necessary to complete other M&O work,
- (c) Monitoring of wildlife habitat values impacted by other activities,

- (d) Support of range improvement projects that contribute to habitat improvement and maintenance, and
- (e) Maintenance of wildlife projects to protect investments.

(2) Develop specific habitat improvement projects as necessary for key wildlife species and habitats.

(3) Establish monitoring studies to evaluate progress toward specific resource objectives established in activity plans.

(4) Evaluate lands for possible disposal or exchange giving high relative weight for retention to lands that have threatened or endangered species or habitats, contain high quality riparian habitat, or contain plant and animal populations or exemplary natural communities of high interest to the state.

(5) Evaluate lands for possible disposal giving moderate relative weight for retention to lands that have high quality woody vegetation or native prairie that could be lost, or serve as high value habitat because of surrounding agriculturally-disturbed lands.

(6) Develop activity plans where necessary to improve habitat management for populations of important wildlife species.

(7) Include wildlife management prescriptions in activity plans initiated by other resources.

(8) Arrange cooperative management agreements with resource management agencies or special interest groups concerned with habitat management when high importance habitats cannot be intensively managed or fully protected by BLM.

(9) Identify the need for emergency ORV limitations where necessary to minimize short- and long-term impacts to wildlife habitats and populations.

The following management actions are in no particular order of priority:

(10) Apply Montana BLM Standard Stipulations to new oil and gas leases on up to 253,583 acres to protect threatened and endangered species and their habitats and certain key wildlife habitats.

(11) Stipulate No Surface Occupancy on federally-designated natural areas, state-dedicated nature preserves, or state-managed natural areas on oil and gas leases.

(12) Review the need for special stipulations on up to 206,811 acres of on new oil and gas leases to protect key wildlife species and habitats.

(13) Revise special stipulations for new oil and gas leases if they are not effective in providing the desired degree of resource protection.

(14) About 178,125 acres will be subject to the special vegetation reclamation stipulation that an acreage equivalent to that disturbed by coal mining will be reclaimed to approximately its former condition. Performance standards for native grassland, woodland, and fish and wildlife habitat revegetation will be applied to these sites Public Service Commission (PSC), State of North Dakota, Rules governing the Reclamation of Surface-mined Land, 1987: sections 69-05.2-22-02 and 69-05.2-22-07).

(15) Review all wildlife-related management actions for conformance with the North Dakota Resource Management Plan.

Lands and Realty

Objectives for Resource Condition and Use

- (1) To pursue a long-term program of repositioning public lands toward improved manageability and increased public benefits.
- (2) To maintain the availability of public land for authorized uses.
- (3) To maintain the integrity of public lands by resolving trespass.
- (4) To complete title resolutions cases.
- (5) To accommodate right-of-way and other use demands while minimizing adverse impacts to natural resources.

Allocation of Resources or Land Use

- (1) 22,739 acres of public land surface are available for exchange or disposal (including transfer to other federal agencies and R&PP patents).
- (2) 11,715 acres of public land surface are available in the Big Gumbo and Lost Bridge consolidation areas for exchange only (Maps C-1 and C-2).
- (3) 67,571 acres of public land surface are open for consideration for authorized uses, including permits and leases.
- (4) 67,571 acres of public land surface are open for consideration of rights-of-way. Rights-of-way on the following areas will be avoided unless there is no reasonable alternative:
 - (a) areas having potential for recreational development,
 - (b) environmental sensitive areas such as crucial wildlife habitats, wetlands, slump areas, and extensive wooded areas,
 - (c) areas containing significant archaeological, historical, or paleontological values,
 - (d) areas with specific visual objectives (e.g., adjacent to established parks, adjacent to the Little Missouri Scenic River), and
 - (e) areas with high potential for coal mining.

(5) Rights-of-Way will be placed within or adjacent to existing rights-of-way whenever possible given engineering and environmental constraints.

Management Actions

(1) Manage the lands and realty program to at least the minimum acceptable levels addressed in the "Maintenance Operations" as established for the Montana Organization.

The following management actions are equally high in priority:

(2) Issue a permit/lease or other instrument to resolve unauthorized agricultural use of public lands in the following situations:

- (a) until disposition or reclamation of the land has occurred,
- (b) where the acreage is small, causes low impact, and is incidental to similar uses on adjacent land, and
- (c) where agricultural use will benefit public values.

(3) Resolve unauthorized use of public lands through termination, cooperative agreement authorized by the Sikes Act, authorization by lease or permit, issuance of a right-of-way, exchange, or sale. Priorities are:

- (a) cases of new unauthorized activities or uses where prompt action can minimize damage to public resources and associated costs,
- (b) cases where delay may be detrimental to authorized users,
- (c) cases involving special areas, sensitive ecosystems, and resources of national significance,
- (d) cases involving malicious or criminal activities, and
- (e) cases of unauthorized landfills and dump sites where there is a potential for hazardous material/waste dumping.

(4) Construct new roads and reconstruct all or portions of existing roads in a manner minimizing surface disturbance with a limit of one main road to each facility, using the guidelines and stipulations given in leases and other authorizations, "Surface Operating Standards for Oil and Gas Exploration and Development", and Handbook H-2801-1.

(5) Accommodate and designate right-of-way corridors in accordance with the North Dakota Energy Conversion Siting Act and in consideration of other resources and uses important to the public as the need is presented.

The following management actions are in the medium priority category. The actions are presented in priority order within this category:

(6) Manage lands and minerals returned to BLM administration through withdrawal revocation and R&PP patent reversion or acquired through gifts or exchanges in accordance with the objectives, resource allocations, and decisions presented in the RMP/EIS.

(7) Evaluate all exchange or acquisition proposals according to the criteria listed in the State Director's Guidance for Land Pattern Review and Land Adjustments and site-specific criteria presented herein.

(8) Take disposal actions on lands previously classified under the C&MU Act (Appendix J of the Draft RMP/EIS) as parcels identified for disposal in Appendix B.

(9) Use the following order of preference in adjusting the land ownership pattern:

- (a) exchange (including the mineral estate with the surface estate if the land does not contain known mineral deposits) for lands that would provide equal or greater public benefits,
- (b) transfer to other federal agencies better able to manage the land for public benefits,

- (c) disposal to state agencies or private groups better able to manage the land for public benefits,
- (d) R&PP patent, or
- (e) sales.

(10) Use exchanges as the only means to adjust land patterns within the Big Gumbo or Lost Bridge consolidation areas or lands contiguous to tracts retained for manageable resource values.

(11) Consider identifying private groups or state agencies, better able to manage and preserve special resource values, as designated bidders in circumstances where unmanageable tracts contain high resource values and private groups have expressed interest.

(12) Pursue the sale of sanitary landfill sites to present lessees.

(13) Consider and make available public land, on a case-by-case bases, for sale or exchange for solid and hazardous material/waste disposal/transfer.

(14) Consider only coal determined to be acceptable for future consideration for leasing, for coal exchanges.

(15) Consider exchange of other minerals (leasable and salable) on a case-by-case basis.

The following management actions are presented in no particular order of priority:

(16) Obtain/reserve easements to preserve important resources determined to be in the public interest on public and private lands, e.g., archaeological sites, historical sites, scenic areas, or habitat for wildlife species.

(17) Include protective covenants in patents (least desirable method of preserving resource values) if they are consistent with county zoning or state law.

(18) Reserve easements in patents, if needed to insure public access to other public land.

(19) Acquire access easements where legal/physical access is lengthy or arduous and a need has been demonstrated.

(20) Develop and maintain a transportation plan to include legal access, addressing consolidated areas, illustrating ORV designations, and identifying the disposition of main and spur roads in oil and gas areas as development diminishes in intensity and size.

(21) Use rights-of-way or cooperative agreements instead of withdrawals whenever workable.

(22) Review withdrawals to determine whether, and for how long, the withdrawal would be consistent with the objectives of the programs for which the lands were withdrawn and for consistency with other relevant programs. Revoke those not needed.

(23) Present concerns addressing potential impacts of siting for energy conversion facilities and major transportation lines on important public land and mineral resources to the North Dakota PSC.

(24) Present concerns caused by proposed railroad abandonments to North Dakota PSC.

Recreation and Visual Resources

Objectives for Resource Condition and Use

- (1) To provide opportunities for dispersed, non-developed recreational use of all public lands in North Dakota.
- (2) To accommodate future demand for primitive recreational developments.
- (3) To maintain visual qualities wherever possible.

Allocation of Resources or Land Use

- (1) ORV use will be allowed with seasonal restrictions on 22,164 acres of public surface.
- (2) Unrestricted ORV use will be allowed on all remaining public surface.

Management Actions

- (1) Carry out M&O activities. These include the following:
 - (a) Approve or deny use authorizations as requested by the public for all competitive recreational and commercial uses, and as required for private and group uses,
 - (b) Provide special designations as needed to preserve future options.

The following are not presented in any particular order of priority:

- (2) Recreation management in the Big Gumbo area will be given budget priority.
- (3) Sign sizeable blocks of public land to identify public access.
- (4) Prepare activity plans for the development of recreational facilities, such as campgrounds, when necessary to meet public demand.
- (5) Acquire access easements where legal/physical access is lengthy or arduous and a need has been demonstrated.
- (6) Avoid or otherwise mitigate actions that potentially affect the present character of stream segments listed on the Nationwide Rivers Inventory.
- (7) Identify potential recreational opportunities on public lands and protect those opportunities when feasible.
- (8) Consider impacts to the visible landscape during all phases of land use planning.
- (9) Ensure that the high visual qualities of National Park Service (NPS) Units are considered in cooperation with the NPS when a specific mineral lease or development action is proposed that potentially affects existing visual qualities.
- (10) Mitigate visual impacts from oil and gas development within a 3.5-mile radius of Fort Union Historic Site. If visual impacts cannot be adequately mitigated within the 3.5-mile radius oil and gas development will not be permitted.
- (11) Consider measures to protect the visual resources of NPS Units during coal activity planning.

Cultural Resources

Objectives for Resource Condition and Use

- (1) To protect and preserve a representative sample of the full array of cultural resources to the benefit of scientific and socio-cultural use by present and future generations.
- (2) To ensure that cultural resources are given full consideration in all land use planning and management decisions.
- (3) To manage cultural resources so scientific and socio-cultural values are not diminished, but rather maintained and enhanced.
- (4) To ensure the Bureau's undertakings avoid inadvertent damage to cultural resources both federal and non-federal.

Allocation of Resources or Land Use

- (1) Under multiple-use tradeoff 3,961 acres of federal coal from two locations were eliminated from further consideration for coal leasing. The two areas eliminated from further consideration include the eligible Knife River Flint Historic District and Writing Rock Historic Site.

Management Actions

- (1) Carry out all M&O activities for the cultural resource management program. These include the following:
 - (a) Complete Section 106 process on all federal undertakings unless those undertakings are identified as categorical exclusions in the District's Programmatic Agreement with the ACHP and the SHPO.
 - (b) Conduct archaeological and historical investigations as requested from and in support of the appropriate benefiting activity.
 - (c) Manage and protect unusually significant cultural resources on public land for future scientific research opportunities and for the general public.
 - (d) Systematically maintain cultural resource records and data.

The following are presented in no particular order of priority:

- (2) Mitigate the effect of sale or exchange of public land on cultural resources eligible to the National Register of Historic Places caused by the sale or exchange of public land.
- (3) Develop Activity plans consistent with M&O elements for specific research projects on unique and significant cultural resources located on public lands.
- (4) Consider cultural resources in all other activity plans.

Paleontological Resources

Objectives for Resource Condition and Use

- (1) To ensure the protection and wise use of significant paleontological resources located on public land.
- (2) To consider on a case-by-case basis the effect of the Bureau's undertakings on paleontological resources.

Management Actions

- (1) Carry out M&O activities for paleontology. These activities include:
 - (a) provide protection and maintain integrity of significant paleontological resources, and
 - (b) maintain a complete list of known paleontological resources.

The following are presented in no particular order of priority:

- (2) Prepare Activity Plans consistent with M&O elements and for specific paleontological research, preservation, stabilization, and protection projects.
- (3) Paleontological resources will be considered during preparation of all activity plans.

Fire Management

Objectives for Resource Condition and Use

- (1) Allow fire to play a natural role in the ecology of vegetation communities on public lands insofar as life, property, or private resources are not threatened.

Management Actions

- (1) Control wildfires on public lands.
- (2) Establish cooperative agreements with county governments where necessary for the control of fires on public lands.
- (3) Require permittees, lessees, and contractors to control fires on any public lands included in their operations.
- (4) Prepare prescribed burn plans for vegetative manipulation where appropriate.
- (5) Ensure that prescribed burn plans are reviewed by county governments, permittees, and adjacent landowners.

Interdisciplinary Resources

Objectives for Resource Condition and Use

- (1) To protect all critical resource values not categorized above.
- (2) To maintain or improve all manageable wetland or riparian habitats presently in satisfactory condition.
- (3) To improve all manageable wetland or riparian habitat presently in unsatisfactory condition.

Management Actions

- (1) Make ACEC designations where critical resource values cannot be protected through other management actions.
- (2) Rank riparian tracts and evaluate for ecological condition, potential, and suitability for management by 1995.
- (3) Implement management plans on all manageable riparian areas by the year 2001.
- (4) Ensure that adequate quantifiable riparian objectives are included in all pertinent activity plans.

- (5) Make unmanageable riparian areas available for:
 - (a) exchange for similar, more manageable habitat,
 - (b) transfer to another federal agency or state agency,
 - (c) management by a federal or state agency under a cooperative agreement, or
 - (d) sale.
- (6) Place a special stipulation on all rights-of-way, leases, and permits, where applicable, to protect riparian habitats.
- (7) Give high relative weight to retaining or acquiring lands that contain high quality riparian vegetation that could be destroyed if transferred from public ownership.

MONITORING GOALS AND TARGETS

Monitoring goals and targets have been established for all resources. They represent the resource conditions that must be assessed to measure the effectiveness of prescribed management actions. Monitoring goals and targets are tied directly to the objectives for resource conditions and use. They are not intended to substitute for the district monitoring plan but instead establish the subjects and purposes of future monitoring efforts. Specific monitoring activities and techniques will be developed outside of the RMP process.

Soil, Water and Air

The following resource conditions will be monitored:

- (1) Water quality and related watershed conditions,
- (2) Ground water in relation to surface disturbance and pesticide application,
- (3) Soil surface factors on rangelands,
- (4) Active erosion (especially headcuts), and
- (5) Air quality, particularly H₂S and SO₂, in relation to energy mineral development in areas of concern.

Oil and Gas

The following resource conditions and stipulations will be monitored:

- (1) Lease information,
- (2) Affect of special stipulations on oil and gas development,
- (3) Fulfillment of responsibilities established by inter-agency and other cooperative agreements,
- (4) Impacts to air quality from flaring and other operations,
- (5) Compliance with specific conditions of approval for APDs and Sundry notices for the protection of air quality,
- (6) Need and feasibility of hook-ups to gas gathering systems where unacceptable impacts to air quality are occurring, and

- (7) Compliance with mitigating measures designed to protect air quality.

Coal

The following resource conditions will be monitored:

- (1) Lease information (tonnages and total acreages, threshold acreages, extent of development), and
- (2) Surface resource impacts in relation to reclamation and effectiveness of lease stipulations.

Mineral Materials and Locatable Minerals

The following resource conditions and situations will be monitored:

- (1) Location and availability of locatable and saleable minerals,
- (2) Authorized use of locatable and saleable minerals, and
- (3) Federal saleable minerals adjacent to population actions or construction areas that indicate potential for unauthorized use.

Grazing Management

The following resource conditions and situations will be monitored:

- (1) Actual use,
- (2) Utilization,
- (3) Climate,
- (4) Range condition,
- (5) Trend, and
- (6) Unauthorized use.

Wildlife Habitat Management

Monitoring will include an evaluation of quality and trend of:

- (1) Breeding habitat for Threatened and Endangered Species,
- (2) Key breeding habitat for migratory birds of high federal interest,
- (3) Sites with rare plant and animal populations or exemplary natural communities,
- (4) Key nesting and winter habitat for sage grouse,
- (5) Key habitat for pronghorn, elk, and bighorn sheep,
- (6) Habitat created or improved through project work, and
- (7) Key habitat impacted by other activities.

Lands and Realty

The following resource conditions and situations will be monitored:

- (1) All oil and gas fields on public surface for unauthorized use or occupancy,
- (2) All public lands adjacent to agricultural development for unauthorized use or occupancy, and
- (3) Compliance of authorized uses with required mitigation.

Recreation and Visual Resources

The following resource conditions will be monitored:

- (1) Public lands in relation to developments that may adversely affect recreational and visual resources, and
- (2) Demand for recreational use of public land in North Dakota.

Cultural Resources

The following resource conditions and situations will be monitored:

- (1) A representative sample of all fieldwork conducted on public lands or on lands that the BLM has an interest in, and
- (2) Cultural resources located on public surface in relation to possible adverse impacts from resource uses, erosion, or vandalism.

Paleontological Resources

The following resource conditions and situations will be monitored:

- (1) A representative sample of all fieldwork conducted on public lands or on lands that the BLM has an interest in, and
- (2) Paleontological resources located on public surface in relation to possible adverse impacts from other resource uses, erosion, or vandalism.

Fire Management

The following resource situations will be monitored:

- (1) Effectiveness of, and compliance with, terms of any cooperative agreements established for the control of wild-fire on public land.

Interdisciplinary Resources

The following resource conditions and situations will be monitored:

- (1) Condition and trend of riparian vegetation on all manageable sites.

COORDINATION, CONSULTATION AND SUPPORT NEEDS

Coordination, consultation and support needs include contacts with both internal (BLM) and external (e.g., state

agencies, Indian tribes) groups. Support efforts include assistance in the planning or design of projects, technical review or input, coordinated management efforts, and mandated consultation.

Identification of major support needs here is intended to highlight some of the coordination and consultation needs identified during the planning process and allow advance programming of support personnel. Day-to-day support needs are not listed.

Soil, Water and Air (4341)

Internal

- (1) Archaeological survey and clearance for surface-disturbing projects,
- (2) Range conservationist input into watershed projects and coordination with range conservationist and wildlife biologist when planning riparian area management and related projects,
- (3) Data from geologist for soil and groundwater monitoring and management,
- (4) MSO, Denver Service Center, and Wyoming State Office (air quality only) assistance and review of monitoring, studies, and project proposals.

External

- (1) Cooperative monitoring of groundwater in relation to pesticide application with the North Dakota Geological Survey (NDGS) and the NDS DH,
- (2) Cooperative monitoring and study of air quality in relation to energy mineral development with the NDS DH,
- (3) Coordination with the North Dakota PSC in identifying and protecting buried valley aquifers,
- (4) Coordination with the North Dakota State Water Commission (SWC) in water quality planning (Section 208 of the Clean Water Act),
- (5) Coordination with NDS DH and/or the Three Affiliated Tribes when the potential for authorized actions to exceed air quality standards is identified,

Oil and Gas (4111, 4112)

Internal

- (1) District staff review of lease offerings for need to apply special lease stipulations,
- (2) Coordination with soil, water, and air program leader for planning and programming air quality monitoring and study in relation to oil and gas development, and
- (3) Coordination with realty specialist for ensuring proper use authorization of oil and gas development ancillary facilities.

External

- (1) Coordination with the NDS DH and Three Affiliated Tribes in monitoring and managing air quality in relation to oil and gas development, and
- (2) Coordination with the NDGFD and USFWS when reviewing controversial mitigation requirements or proposed development in crucial fish and wildlife habitats.

Coal (4121)

Internal

- (1) Interdisciplinary district preparation and review of plans and environmental analyses for actions such as lease readjustments, exploration licenses and permits, and mine plan review, and
- (2) Interdisciplinary district staff preparation of environmental analyses for coal lease offerings.

External

- (1) Coordination with North Dakota PSC during review of mine permits,
- (2) Cooperative review of surface mine permits involving Federal coal with the Office of Surface Mining, Reclamation and Enforcement,
- (3) Coordination with NDS DH for assessment of potential air quality impacts resulting from development of Federal coal,
- (4) Coordination and/or consultation with the NDGFD and USFWS when analyzing coal lease proposals, and
- (5) Consultation with North Dakota PSC to identify and protect alluvial valley floors and buried-valley aquifers.

Mineral Materials and Locatable Minerals (4131, 4132, 4133)

Internal

- (1) Coordination between Division of Minerals and Division of Lands and Renewable Resources in identifying potential unauthorized uses.

Grazing Management (4322, 8100)

Internal

- (1) Archaeological survey and clearance prior to surface-disturbing projects,
- (2) Interdisciplinary development of activity plans and project proposals,
- (3) Realty program and specialist support in identifying and processing realty actions for the benefit of range management, and
- (4) Automated data processing support of grazing record data storage and retrieval and use of geographical information systems.

External

- (1) Review of grazing management activity plans by state agencies such as the NDGFD and State Department of Lands, and
- (2) Coordination with the SCS when public lands are included or could be included in farm or ranch management plans.

Wildlife Habitat Management (4351, 4352)

Internal

- (1) Archaeological survey and clearance prior to surface-disturbing projects,

- (2) Status of grazing on tracts where inventory, monitoring, or project work is involved,
- (3) Soil evaluations for seedings and plantings,
- (4) Status of land disposal or exchange where inventory, monitoring, or project work is involved, and
- (5) Information on likelihood of oil and gas development or seismic exploration in certain areas where artificial nest sites for raptors are contemplated.

External

- (1) North Dakota Parks and Recreation Department information on location of registered Natural Areas during review of potential oil and gas leases,
- (2) NDGFD inventory and monitoring of piping plovers, least terns, black-footed ferrets and other threatened or endangered species to properly plan and coordinate management activities,
- (3) NDGFD inventory of rare plants,
- (4) Consultation with USFWS where projects potentially affect habitats of threatened or endangered species, and
- (5) Consultation with NDGFD and USFWS when reviewing coal leases exceeding wildlife thresholds within a given coal study area.

Lands and Realty (4211, 4212, 4220)

Internal

- (1) District L&RR staff for evaluating potential exchanges, sales, rights-of-way, unauthorized use resolution, permits and leases, and R&PP patents.
- (2) District Geologist for mineral reports,
- (3) MSO appraisal staff,
- (4) MSO lands staff for patent work,
- (5) Solicitor for title insurance review,
- (6) MSO Cadastral Survey,
- (7) DSC for rental billings,
- (8) MSO Special Agent for guidance in criminal actions,
- (9) MSO lands staff for review of compromise offers and bad-debt write-off,
- (10) Solicitor for review of compromise offers and bad-debt write-off,
- (11) MSO records section.

External

- (1) Realtors to provide information concerning available land and to act as proponents in pooling-exchanges, as needed. Realtors and banks provide escrow services,
- (2) County Commissioners and Advisory Board to support lands and realty programs, including exchanges and trespass resolution,
- (3) County and state officials to support the recordation of all RS2477 roads,
- (4) County officials and USFS to coordinate and provide information in mapping access to public land,
- (5) County officials to make courthouse records available,

- (6) Governor's office, NDGFD, and North Dakota Parks and Recreation Department to review and provide comments on exchange and sales proposals,
- (7) North Dakota PSC to provide notification of proposed new rights-of-way and proposed railroad abandonments,
- (8) ASCS to make records available to research suspected trespass cases,
- (9) USFWS, USFS, and BIA to cooperate in possible land ownership/administration adjustments,
- (10) BR and USFWS to cooperate in the review of withdrawals,
- (11) Utilities cooperatives and energy companies to coordinate and provide technical information on specific land uses.

Recreation and Visual Resources (4333)

Internal

- (1) Program guidance from the MSO program lead for recreation for preparation of PAWP and AWP, for the development of program objectives and goals, and for technical assistance on implementing operation activities on public land.

External

- (1) Coordination and consultation with North Dakota Parks and Recreation Department on program goals and recreational needs of the public.
- (2) Coordination with other state and federal agencies regarding Bureau operations which affect the landscape e.g., placement of signs, campgrounds, and less developed recreational facilities.

Cultural Resources (4331)

Internal

- (1) Program guidance from the MSO staff archaeologist for preparation of PAWP and AWP, for the development of program objectives and goals, for preparation of Annual Report of Cultural Resources, and for the coordination of Cultural Resource Use Permits.
- (2) Interdisciplinary input from soil scientist on field identification of soil types, soil development processes, and Holocene-age geomorphology.
- (3) Staff input on the status of land adjustment program, range improvement proposals, oil and gas activities, and the coal program so that archaeologist can assess the impacts of such activities and programs on cultural resources.
- (4) Technical support of archaeological data base by computer scientist and data entry personnel.

External

- (1) Procedural guidance on the Section 106 process from the SHPO and the ACHP.

- (2) Professional guidance and expertise from anthropology faculty at the University of North Dakota on prehistoric technologies, prehistoric settlement and subsistence patterns and current research questions and concerns.
- (3) Coordination with Indian tribes on Bureau actions that potentially disturb currently used and formerly used sacred areas and/or sites.

Paleontological Resources (4331)

Internal

- (1) MSO support from staff archaeologist for preparation of PAWP and AWP, program goals and objectives, current developments in paleontology and coordination of Cultural Resource Use Permits.
- (2) Technical support from district geologists on the geology of public lands and on lands in which the Bureau has an interest.
- (3) Staff input on the status of land adjustment program, range improvement proposals, oil and gas activities, and the coal program so that archaeologist can assess the impacts of such activities and programs on paleontological resources.

External

- (1) Information from the North Dakota Geological Survey on the location and significance of paleontological resources on public land and on lands in which the Bureau has an interest.

Fire Management

External

- (1) Coordination with county governments for fire suppression cooperative agreements,
- (2) Coordination with county governments, permittees, and adjacent landowners on prescribed burn plans and analyses.

Interdisciplinary Resources

Internal

- (1) Staff coordination on identification of critical resources that may require ACEC designation to manage adequately.
- (2) Staff coordination in occurrence of, or problems with, wetland or riparian habitats.
- (3) Coordinate with MSO to ensure proper implementation of the Montana riparian management strategy.

External

- (1) Information from NDGFD and USFWS on critical resources that may warrant ACEC designation.
- (2) Information from above agencies in occurrence of, or problems with, wetland or riparian habitat on public land.

APPENDIX A

APPLICATION OF THE COAL LAND USE PLANNING SCREENS

TABLE A-1
SUMMARY OF ACREAGES ACCEPTABLE FOR
FURTHER CONSIDERATION

CSA	Acres
Antelope	28,014
Arnegard	11,290
Beulah-Zap	41,134
Bowman-Gascoyne	19,261
Center-Stanton	22,706
Dickinson	50,027
Divide	2,819
Dunn Center	63,710
Elgin-New Leipzig	13,436
Elkhorn	17,017
Fortuna	7,197
Garrison	2,343
Golden Valley	17,780
Hanks	34,765
Keene	42,553
Mott	39,803
New England	77,195
Niobe	160
Sand Creek	39,775
Tobacco Garden	9,596
Underwood	1,605
Velva	2,562
Washburn	1,002
Williston	27,958
Total	573,868

TABLE A-2
SUMMARY OF COAL SCREENS

CSA	Acres Federal Coal	ACRES EXCLUDED				Acres Acceptable
		Unsuit.	Multiple Use	Surface Owner	Wildlife Threshold ¹	
ANTELOPE	32,360	910	3,436	0	1,082	28,014
ARNEGARD	25,020	105	3,108	10,517	2,147	11,290
BEULAH-ZAP	57,200	10,274	4,013	1,779	1,627	41,134
BOWMAN-GASCOYNE	21,320	231	1,828	0	1,301	19,261
CENTER-STANTON	27,480	1,197	2,457	1,120	1,316	22,706
DICKINSON	108,628	6,842	42,877	8,882	290	50,027
DIVIDE	3,760	461	0	480	0	2,819
DUNN CENTER	88,560	5,196	6,859	15,115	382	61,390
ELGIN-NEW LEIPZIG	14,400	325	399	240	219	13,436
ELKHORN	25,380	267	4,185	3,911	2,442	17,017
FORTUNA	19,400	8,539	2,028	1,636	169	7,197
GARRISON	12,660	4,067	5,623	627	0	2,343
GOLDEN VALLEY	21,960	850	852	2,478	0	17,780
HANKS	47,100	2,917	6,663	2,755	3,947	34,765
KEENE	122,700	14,600	49,462	16,085	5,618	42,553
MOTT	42,200	806	1,591	0	1,300	39,803
NEW ENGLAND	95,800	5,569	1,266	11,770	196	77,195
NIOBE	160	0	0	0	0	160
SAND CREEK	57,240	1,761	8,406	7,298	2,328	39,775
TOBACCO GARDEN	64,060	50,385	283	3,796	0	9,596
UNDERWOOD	2,600	995	0	0	0	1,605
VELVA	20,280	16,122	1,596	0	0	2,562
WASHBURN	1,360	85	273	0	130	1,002
WILLISTON	98,020	60,878	9,030	154	811	27,958
TOTAL	1,009,648	193,382	156,235	88,643	25,305	571,388

¹Wildlife threshold acreages are included in multiple use.

TABLE A-3

ACRES EXCLUDED FROM FURTHER CONSIDERATION DUE TO COAL UNSUITABILITY CRITERIA

CSA	UNSUITABILITY CRITERION									Gross Total ²	Net Total ³
	1	3 ¹	7	11	13	14	15	16	19		
Antelope	40	1,156	0	0	0	25	0	444	571	1,080	910
Arnegard	0	296	0	0	0	0	0	105	0	105	105
Beulah-Zap	0	468	0	0	0	913	8,979	600	1,801	12,293	10,274
Bowman-Gascoyne	320	368	0	0	0	0	0	189	0	509	231
Center-Stanton	0	664	0	0	0	0	0	226	1,018	1,244	1,197
Dickinson	40	2,411	0	1,057	0	1,024	0	3,939	2,984	9,044	6,842
Divide	347	66	0	0	0	37	0	80	80	544	461
Dunn Center	285	1,472	0	0	0	695	0	3,897	3,489	8,366	5,196
Elgin-New Leipzig	0	287	0	0	0	0	0	201	167	368	325
Elkhorn	0	460	0	310	0	0	0	0	0	310	267
Fortuna	4,690	412	0	0	0	3,908	0	0	0	8,598	8,539
Garrison	1,960	452	0	0	0	1,874	0	569	753	5,156	4,067
Golden Valley	640	745	0	0	0	0	0	211	211	1,062	850
Hanks	95	4,337	0	0	0	1,701	0	436	1,144	3,376	2,917
Keene	0	2,323	0	702	98	900	11,805	516	1,549	15,570	14,600
Mott	0	2,340	0	0	0	790	0	9	0	799	806
New England	0	10,700	0	0	0	0	0	2,225	5,533	7,758	5,569
Niobe	0	11	0	0	0	0	0	0	0	0	0
Sand Creek	60	4,261	0	0	0	0	0	943	1,320	2,323	1,761
Tobacco Garden	0	1,242	0	8,970	0	0	36,711	384	5,440	51,505	50,385
Underwood	303	79	0	0	0	657	0	0	0	960	995
Velva	5,159	644	0	0	0	11,419	0	0	0	16,578	16,122
Washburn	0	29	0	0	0	0	0	100	17	117	85
Williston	0	8,160	0	5,200	0	0	50,270	441	5,932	61,843	60,878
TOTAL	13,939	43,383	0	16,239	98	23,943	107,765	15,515	32,009	209,508	193,382

¹Criterion 3 acreages not included in gross or net totals because overlap with other criteria is unknown.

²No consideration given to overlap among unsuitability criteria.

³Overlap among unsuitability criteria subtracted from gross total.

TABLE A-4

ACRES EXCLUDED FROM FURTHER CONSIDERATION DUE TO MULTIPLE-USE TRADEOFFS

Communities Having 1980 Pop. Less Than 500 Persons				Communities Having 1980 Pop. Equal To or Greater Than 500 Persons				Pipelines Equal To or Greater Than 12 Inches in Diameter				Electric Transmission Lines Equal To or Greater Than 230 KV				Agricultural Experiment Station				Eligible River				Writing Rock Historic Site				Wildlife Threshold				Steep Slopes & Gas Fields				Key Oil Fields				City of Dickinson Municipal Watershed				Gross Total		Net Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
CSA	Antelope	Arnegard	Beulah-Zap	Bowman-Gascoyne	Center-Stanton	Dickinson	Divide	Dunn	Center-Elgin-New	Leipzig	Elkhorn	Fortuna	Garrison	Golden Valley	Hanks	Keene	Mott	New England	Niobe	Sand Creek	Tobacco	Garden	Underwood	Velva	Washburn	Williston	Total	1,945	1,925	2,040	2,154	11,240	266	469	660	309	440	3,761	40	25,305	79,478	76,520	38,536	245,088	154,555																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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TABLE A-5
WILDLIFE THRESHOLD ACREAGES¹

CSA	Original Threshold Acres ²	Remaining Threshold Acres ³	Percent Remaining Threshold Acres Excluded	Threshold Acres Excluded	Coal Tonnages Excluded ⁴
Antelope	3685	2164	50	1082	15.34
Arnegard	7409	4294	50	2147	20.66
Beulah-Zap	5582	3253	50	1627	17.08
Bowman-Gascoyne	1929	2169	60	1301	89.25
Center-Stanton	2811	2193	60	1316	11.52
Dickinson	3046	1450	20	290	9.90
Divide	0	0	0	0	0.00
Dunn Center	5195	1911	20	382	8.69
Elgin-New Leipzig	1278	731	30	219	3.45
Elkhorn	7326	4883	50	2442	21.37
Fortuna	998	562	30	169	3.76
Garrison	1150	0	0	0	0.00
Golden Valley	191	181	0	0	0.00
Hanks	12762	7894	50	3947	93.25
Keene	12059	9363	60	5618	56.04
Mott	3418	2599	50	1300	12.51
New England	3964	979	20	196	3.43
Niobe	0	0	0	0	0.00
Sand Creek	10515	5820	40	2328	28.11
Tobacco Garden	1919	197	0	0	0.00
Underwood	0	0	0	0	0.00
Velva	261	54	0	0	0.00
Washburn	478	325	40	130	1.50
Williston	4268	2028	40	811	12.21
Totals	90244	53050	48	25305	408.07
Percent of Original Threshold Acres			28		

¹See page 143 of Final RMP/EIS for Explanation

²Acreage of key wildlife habitats remaining after application of the wildlife unsuitability criteria.

³Acreage of key wildlife habitats remaining after application of wildlife unsuitability criteria, all other unsuitability criteria, multiple-use tradeoffs, and surface owner consultation.

⁴Millions of tons

TABLE A-6
SUMMARY OF SURFACE OWNER CONSULTATION¹

Coal Study Area	Letters Sent	Responses Received	Percent Response	Surface Owners Qualified or Assumed Qualified	Qualified Owners Under Previous Consent Agreements	Qualified Owners Under Previous Consent Agreements Responding "Opposed"	Qualified Owners Without Previous Consent Responding "In Favor"	Qualified Owners Without Previous Consents Responding "Unsure" ²	Qualified Owners Without Previous Consents Responding "Opposed"
Antelope	147	57	39	141	26	9	15	14	21
Arnegard ³	93	57	61	90	2	0	5	8	38
Beulah-Zap	167	70	42	154	23	3	19	20	18
Bowman-Gascoyne ⁴	99	50	51	99	30	10	19	—	11
Center-Stanton	107	44	41	96	25	3	15	7	11
Dickinson ³	417	216	52	400	37	21	17	22	137
Divide	24	14	58	22	0	0	1	1	10
Dunn Center	285	149	52	272	53	34	30	14	92
Elgin-New Leipzig, Mott, and New England ⁵	529	290	55	529	78	44	26	0	162
Elkhorn	72	33	46	68	0	0	5	6	18
Fortuna	99	62	63	93	1	1	16	18	22
Garrison	72	39	54	67	4	2	7	7	20
Golden Valley	94	55	59	86	18	2	8	15	24
Hanks ⁴	175	115	66	175	28	13	10	—	61
Keene	191	89	47	179	1	1	11	23	46
Niobe	2	1	50	2	0	0	0	0	1
Sand Creek ⁴	263	140	53	263	42	18	18	—	71
Tobacco Garden ³	162	77	48	158	2	0	6	12	41
Underwood	6	4	67	6	1	0	2	1	1
Velva	83	39	47	80	4	0	7	8	20
Washburn	13	8	62	10	4	0	2	1	2
Williston ⁴	303	141	47	303	49	23	30	—	61
Total	3403	1750	51	3293	428	184	269	177	888

¹Numerical summary only; identification of significant opposition was based on maps and overlays located in the Dickinson District Office.

²Tabulations of "unsure" responses are not available for CSAs or portions of CSAs included in the McKenzie-Williams and Southwest North Dakota MFPs.

³Portions of surface owner consultation conducted during preparation of McKenzie-Williams or Southwest North Dakota MFPs.

⁴Surface owner consultation conducted during preparation of McKenzie-Williams or Southwest North Dakota MFPs.

⁵Consultation results combined in Southwest North Dakota MFP.

TABLE A-7
ACRES EXCLUDED FROM FURTHER
CONSIDERATION DUE TO SIGNIFICANT SURFACE
OWNER OPPOSITION

CSA	Gross Acres	Net Acres
Antelope	0	0
Arnegard	10,900	10,517
Beulah-Zap	1,800	1,779
Bowman-Gascoyne	0	0
Center-Stanton	1,120	1,120
Dickinson	15,040	8,882
Divide	480	480
Dunn Center	15,640	14,315
Elgin-New Leipzig	240	240
Elkhorn	4,080	3,911
Fortuna	2,760	1,636
Garrison	1,400	627
Golden Valley	2,520	2,478
Hanks	3,280	2,755
Keene	18,280	16,085
Mott	0	0
New England	12,920	11,770
Niobe	0	0
Sand Creek	8,040	7,298
Tobacco Garden	22,390	3,796
Underwood	0	0
Velva	0	0
Washburn	0	0
Williston	10,640	154
TOTAL	131,530	87,843

TABLE A-8
COAL ACREAGES WITH SPECIAL STIPULATIONS¹

Coal Study Area	Vegetative Reclamation Stipulation	Buried-Valley Aquifer Stipulation	National Park Service Units
Antelope	6,780	486	
Arnegard	1,272	384	
Beulah-Zap	12,593	1,152	
Bowman-Gascoyne	5,025	0	
Center-Stanton	5,496	256	
Dickinson	7,336	0	16,795
Divide	1,490	49	
Dunn Center	17,562	1,945	
Elgin-New Leipzig	3,686	0	
Elkhorn	4,952	64	13,285
Fortuna	4,557	2,483	
Garrison	246	26	
Golden Valley	738	0	6,145
Hanks	6,222	179	
Keene	16,680	2,432	
Mott	10,897	0	
New England	17,021	0	
Niobe	80	0	
Sand Creek	15,006	588	
Tobacco Garden	1,705	793	
Underwood	55	0	
Velva	540	201	
Washburn	339	0	
Williston	10,102	1,280	
Totals	150,380	12,318	36,225

¹See page 151 of the Final RMP/EIS.

APPENDIX B

INITIAL LAND CATEGORIZATIONS

TABLE B-1
INITIAL LAND CATEGORIZATION

T.	R.	Sec.	Subdivision	Acreage	Category
Adams					
129 N.	91 W.	5	NESE	40.00	D
TOTAL ACREAGE				40.00	
Barnes					
143 N.	60 W.	12	Lot 1	2.29	D ^{4, 6}
				2.27	D ^{4, 6}
TOTAL ACREAGE				4.56	
Benson					
151 N.	62 W.	34	SWNE	40.00	D ⁴
				40.00	D ⁴
151 N.	65 W.	35	Lot 1	5.30	D ⁴
151 N.	67 W.	13	Lot 2	4.14	D
TOTAL ACREAGE				89.44	
Billings					
141 N.	101 W.	10	All	640.00	D ⁵
TOTAL ACREAGE				640.00	
Bottineau					
162 N.	74 W.	7	Lot 6	0.05	D ⁴
TOTAL ACREAGE				0.05	
Bowman					
131 N.	103 W.	34	NENW	40.00	D
				40.00	D
				40.00	D
				40.00	D
129 N.	104 W.	31	Lot 1	39.82	D
				39.92	D
				39.98	D
				40.00	D
				40.00	D
130 N.	104 W.	18	Lot 4	37.53	D
129 N.	105 W.	1	W2SW	80.00	R
				40.05	R
				40.07	R
				40.09	R
				40.11	R
				80.00	R
				80.00	R
				40.00	D
				40.00	D
				40.00	D
				39.47	D
				39.48	D
				39.54	D
				40.00	D
				80.00	D
				40.00	D
				80.00	R
				80.00	R
				40.00	R
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				40.00	D
				40.00	D

TABLE B-1 (Continued)
INITIAL LAND CATEGORIZATION

T.	R.	Sec.	Subdivision	Acreage	Category
Bowman (cont.)					
130 N.	105 W.	24	N2NE	80.00	D
			NENW	40.00	D
		30	NWNE	40.00	D
			S2NE	80.00	D
		31	Lot 4	39.41	D
			SWNE	40.00	D
			SESW	40.00	D
			S2SE	80.00	D
		32	SWNW	40.00	D
			NESW	40.00	D
			SWSW	40.00	D
			SESE	40.00	D
		33	E2NE	80.00	D
		34	NESE	40.00	R
		35	S2NW	80.00	R
			SW	160.00	R
			W2SE	80.00	R
131 N.	105 W.	4	Lot 1	40.00	R ³
			Lot 2	40.02	R ³
			Lot 3	40.02	R ³
			Lot 4	40.04	R ³
			SENE	40.00	R ³
			E2SW	80.00	R ³
			SWSW	40.00	R ³
			SE	160.00	R ³
		10	N2NW	80.00	D
			SWNW	40.00	D
		15	N2SW	80.00	D
		17	SENE	40.00	D
			S2SE	80.00	D
		18	SWNE	40.00	D
		21	W2NW	80.00	D
			SESW	40.00	D
			S2SE	80.00	D
		22	SWNW	40.00	D
		30	Lot 3	15.68	R ³
			Lot 5	37.10	R ³
		31	Lot 1	24.40	R ³
			Lot 6	39.30	R ³
			Lot 9	1.44	R ³
		34	NE	160.00	D
			NENW	40.00	D
			N2SE	80.00	D
132 N.	105 W.	6	Lot 1	22.45	D
			Lot 2	22.41	D
			Lot 3	22.38	D
			Lot 4	18.47	D
		20	All	640.00	R ³
		26	W2NW	80.00	R ³
			S2SW	80.00	R ³
		28	SENE	40.00	R ³
		32	N2	320.00	R ³
			SWSW	40.00	R ³
			E2SE	80.00	R ³
			SWSE	40.00	R ³
		34	S2NW	80.00	R ³
			SW	160.00	R ³
			W2SE	80.00	R ³
129 N.	106 W.	5	Lot 4	40.40	R
			Lot 5	33.60	R
			Lot 10	19.00	R
			W2SW	80.00	R
			SESW	40.00	R
		6	All	634.40	R
		7	Lot 1	38.75	R
			Lot 2	38.81	R
			Lot 3	38.87	R
			W2NE	80.00	R
			E2NW	80.00	R

TABLE B-1 (Continued)
INITIAL LAND CATEGORIZATION

T.	R.	Sec.	Subdivision	Acreage	Category
Bowman (cont.)					
129 N.	106 W.		E2SW	80.00	R
			SE	160.00	R
		20	S2NW	80.00	R ³
			NE,N2NW,S2	560.00	R
		21	Lot 7	14.56	R ³
			W2NW	80.00	R
			NWSW	40.00	R ³
		22	E2NE	80.00	R ³
		23	SENE	40.00	D
		24	SESW	40.00	D
		27	Lot 3	27.60	R ³
			Lot 4	36.30	R ³
		28	Lot 13	19.50	R ³
			Lot 15	12.40	R ³
		30	Lot 1	39.47	R ³
		33	Lot 3	38.10	R ³
			W2NW	80.00	R ³
			W2SW	80.00	R ³
130 N.	106 W.	2	Lot 11	29.90	R ³
		4	Lot 4	40.00	R
			S2NW	80.00	R
			SW	160.00	R
			W2SE	80.00	R
			SESE	40.00	R
		5	NW	160.06	R
		6	All	626.39	R
		7	All	627.76	R
		8	S2	320.00	R
		9	N2NE	80.00	R
			SWNE	40.00	R
			W2	320.00	R
			W2SE	80.00	R
			SESE	40.00	R
		17	All	640.00	R
		18	All	629.20	R
		19	All	630.56	R
		20	Lot 1	28.00	R
			Lot 2	3.00	R
			N2	320.00	R
			SW	160.00	R
			N2SE	80.00	R
			SWSE	40.00	R
		21	NWNW	40.00	R
			Lot 11	1.74	R
		28	Lot 3	4.15	R
		29	W2	320.00	R
		30	All	631.92	R
		31	All	633.12	R
		32	Lot 4	15.75	R ³
			W2	311.00	R
131 N.	106 W.	6	Lot 4	36.02	R ³
		13	Lot 8	24.30	R ³
			Lot 9	26.00	R ³
			NESE	40.00	R ³
		14	Lot 2	0.56	R ³
		23	Lot 1	8.25	R
			Lots 2,3,		
			W2,NE	130.00	R
			Lot 4	35.80	R
			NENW	40.00	R
			NENWNW,		
			E2NWNWNW,		
			SWNWNWNW,		
			S2NWNW,		
			S2NW, SW,		
			W2SE	359.3	R
			SESE	40.00	R
		24	Lot 5	15.00	R
			Lot 6	31.75	R
			SWNE	40.00	R ³
		25	Lot 2	27.60	R
			Lot 3	20.00	R
			W2NW	80.00	R
			W2SW	80.00	R
			SESW	40.00	R

TABLE B-1 (Continued)
INITIAL LAND CATEGORIZATION

T.	R.	Sec.	Subdivision	Acreage	Category
Bowman (cont.)					
131 N.	106 W.	26	NE	160.00	R
			W2NW	80.00	R
			E2NW	80.00	R
			NESW	40.00	R
			NWSW	40.00	R
			S2SW	80.00	R
			W2SE	80.00	R
			E2SE	80.00	R
		27	SENE	40.00	R
			SESE	40.00	R
			W2E2	160.00	R
			NESE	40.00	R
		31	All	625.44	R
132 N.	106 W.	12	N2N2	160.00	R ³
		28	NWSW	40.00	D
			NESE	40.00	D
129 N.	107 W.	1	S2S2	160.00	R
		2	Lot 3	40.07	R ³
		12	N2N2	160.00	R
			SENE	40.00	R
130 N.	107 W.	1	All	639.84	R
		2	All	639.84	R
		3	All	373.04	R
		10	All	373.20	R
		11	All	640.00	R
		12	All	640.00	R
		13	All	640.00	R
		14	All	640.00	R
		15	All	375.64	R
		22	All	378.68	R
		23	All	640.00	R
		24	All	640.00	R
		25	All	640.00	R
		26	N2	320.00	R
			NESW	40.00	R
			SE	160.00	R
		27	N2	191.15	R
		35	NENE	40.00	R
131 N.	107 W.	2	NW	159.90	R ³
		10	All	363.54	R
		14	W2	320.00	R
		15	All	364.32	R
		22	All	367.00	R
		23	All	640.00	R
		24	SW	160.00	R
		25	W2	320.00	R
		26	All	640.00	R
		27	All	369.40	R
		34	All	372.00	R
		35	All	640.00	R
132 N.	107 W.	26	NENE	40.00	D
			SW	160.00	D
			S2SE	80.00	D
TOTAL ACREAGE				32,646.90	
Burleigh					
142 N.	75 W.	12	S2SW	80.00	D ^{5,6}
		14	S2SW	80.00	D ^{5,6}
			E2SE	80.00	D ^{5,6}
		22	N2NE	80.00	D ^{5,6}
		26	NWNE	40.00	D ^{5,6}
			NENW	40.00	D ^{5,6}
144 N.	77 W.	22	NE	160.00	D ⁶
137 N.	79 W.	19	Tract 39	26.76	D ²
		33	Lot 1	9.30	D ²
137 N.	80 W.	14	Lot 2	35.50	D ²
139 N.	81 W.	4	Lot 1	3.70	D ²
141 N.	81 W.	24	Lot 4	46.50	D ²
		26	Lot 1	28.20	D ²
			Lot 2	53.40	D ²
			NESE	40.00	D ²
			SWSE	40.00	D ²

TABLE B-1 (Continued)
INITIAL LAND CATEGORIZATION

T.	R.	Sec.	Subdivision	Acreage	Category
Burleigh (cont.)					
142 N.	81 W.	4	Lot 4	19.60	D ²
TOTAL ACREAGE				862.96	
Cavalier					
162 N.	58 W.	9	NWNE	40.00	D ⁵
163 N.	58 W.	6	Lot 2	39.64	D ⁵
			Lot 3	39.80	D ⁵
			SWNE	40.00	D ⁵
		25	SENE	40.00	D ⁵
164 N.	59 W.	35	NENE	40.00	D ⁵
TOTAL ACREAGE				239.44	
Divide					
163 N.	95 W.	25	SWSW	40.00	D ^{4,6}
		26	SESE	40.00	D ^{4,6}
		27	SWSE	40.00	D ⁶
160 N.	99 W.	5	SWSE	40.00	D ^{4,6}
160 N.	100 W.	22	SWNE	40.00	D ^{4,6}
			NWSE	40.00	D ^{4,6}
162 N.	102 W.	8	SWNW	40.00	D ^{5,6}
			N2SW	80.00	D ^{5,6}
		17	NENW	40.00	D ⁶
		20	SWNE	40.00	D ^{5,6}
			S2NW	80.00	D ^{5,6}
			SW	160.00	D ^{5,6}
		29	NW	160.00	D ^{5,6}
		30	SENE	40.00	D ^{5,6}
			NESE	40.00	D ^{5,6}
163 N.	102 W.	26	SENE	40.00	D ⁶
			SWNW	40.00	D ⁶
160 N.	103 W.	15	W2NW	80.00	D ⁶
			NWSW	40.00	D ⁶
		21	NENW	40.00	D ⁶
161 N.	103 W.	23	NENE	40.00	D ⁶
			SESE	40.00	D ⁶
		24	SWSW	40.00	D ⁶
162 N.	103 W.	3	Lot 1	40.03	D ^{5,6}
			Lot 2	40.02	D ^{5,6}
			Lot 3	22.36	D ^{5,6}
			Lot 4	22.42	D ^{5,6}
			S2NE	80.00	D ^{5,6}
163 N.	103 W.	11	SESE	40.00	D ⁶
		14	S2SE	80.00	D ⁶
TOTAL ACREAGE				1604.83	
Dunn					
147 N.	94 W.	30	S2	305.16	D
147 N.	95 W.	2	SESW	40.00	D
		8	NWSE	40.00	D
			S2SE	80.00	D
		10	W2NW	80.00	D
			NWSW	40.00	D
148 N.	95 W.	4	Lot 6	38.22	R ³
		7	SESE	40.00	R
		8	N2	320.00	R ³
			S2SW	80.00	R
			SWSE	40.00	R
		9	Lot 1	38.18	R ³
			Lot 2	38.06	R ³
			Lot 3	37.94	R ³
			NWNW	40.00	R ³
			S2NW	80.00	R ³
			N2SW	80.00	R ³
		17	E2	320.00	R
			N2NW	80.00	R
			SENE	40.00	R
			SWSW	40.00	R
		18	Lot 2	43.62	R ³
			NENE	40.00	R ³
			E2SW	80.00	R ³
			NWSE	40.00	R ³
		19	SENE	40.00	R

TABLE B-1 (Continued)
INITIAL LAND CATEGORIZATION

T.	R.	Sec.	Subdivision	Acreage	Category
Dunn (cont.)					
148 N.	95 W.	20	N2	320.00	R
			N2SW	80.00	R
			SESW	40.00	R
			SE	160.00	R
		21	Lot 1	36.96	R
			Lot 2	36.88	R
			Lot 3	36.80	R
			Lot 4	36.72	R
			W2	320.00	R
		28	Lot 1	36.64	R
			Lot 2	36.56	R
			NW	160.00	R
			NWSW	40.00	R
		29	NE	160.00	R
			E2NW	80.00	R
			NESW	40.00	R
			N2SE	80.00	R
		30	Lot 1	43.97	R ³
			Lot 2	43.91	R ³
			Lot 3	43.85	R ³
			W2NE	80.00	R ³
			E2NW	80.00	R ³
			NESW	40.00	R ³
			NWSE	40.00	R ³
147 N.	96 W.	2	S2NE	80.00	R ³
		4	E2E2	161.13	R ³
			SW	160.00	R ³
		6	Lot 3	40.29	R ³
			NE	161.19	R ³
		12	E2NW	80.00	D
			N2SE	80.00	D
148 N.	96 W.	1	SENE	40.00	R ³
		2	SWNE	40.00	R ³
			S2NW	80.00	R ³
			NESW	40.00	R ³
			NWSE	40.00	R ³
		3	Lot 1	25.62	R ³
			Lot 2	25.84	R ³
		5	NE	134.64	R ³
			NWSE	40.00	R ³
		6	Lot 2	27.24	R ³
			Lot 6	33.16	R
			Lot 7	9.50	R
			Lot 8	12.87	R
			SWNE	40.00	R ³
			NW	135.04	R
			NESW	40.00	R
		7	Lot 3	38.14	R
			Lot 4	0.80	R
			Lot 11	38.05	R ³
			SESW	40.00	R ³
		8	SENE	40.00	R ³
			NESW	40.00	R ³
			N2SE	80.00	R ³
		9	SWNW	40.00	R ³
		17	Lot 1	39.70	R ³
			Lot 2	27.20	R ³
			Lot 3	38.60	R ³
			Lot 4	44.70	R ³
			E2NE	80.00	R ³
			NWNE	40.00	R ³
		18	E2NW	80.00	R ³
		19	SENE	40.00	R ³
		21	Lot 5	34.60	R ³
			S2	320.00	R ³
		22	N2SW	80.00	R ³
			SWSW	40.00	R ³
		23	SWNE	40.00	R ³
			N2SE	80.00	R ³
		24	E2NE	80.00	R ³
		25	S2NE	80.00	R ³
		26	Lot 7	25.50	R ³
			Lot 9	47.50	R ³
		28	N2NW	80.00	R ³
			NESE	40.00	R ³

TABLE B-1 (Continued)
INITIAL LAND CATEGORIZATION

T.	R.	Sec.	Subdivision	Acreage	Category
Dunn (cont.)					
148 N.	96 W.	29	NENE	40.00	R ³
			W2SW	80.00	R
			SESE	40.00	R ³
		30	W2	300.80	R
			W2NE	80.00	R
			SE	160.00	R
		31	SENE	40.00	R ³
			NESW	40.00	R ³
			E2SE	80.00	R ³
			NWSE	40.00	R ³
		34	NWSW	40.00	R ³
		35	Lot 1	2.78	R ³
146 N.	97 W.	4	SWSW	40.00	D
		28	NE	160.00	D
		30	W2NE	80.00	D
147 N.	97 W.	8	SESW	40.00	R ³
		18	Lot 1	38.66	R ³
			Lot 2	38.78	R ³
			Lot 4	39.02	R ³
			E2E2	160.00	R ³
			NENW	40.00	R ³
		30	Lot 1	38.84	D
			Lot 2	38.82	D
		32	NENW	40.00	D
			NESE	40.00	D
148 N.	97 W.	1	Lot 1	28.18	R
			Lot 2	28.06	R
			Lot 3	27.94	R
			Lot 4	27.47	R
			Lot 5	30.70	R
			S2NE	80.00	R
			SENW	40.00	R
			Lot 6	20.00	R
			Lot 7	44.00	R
			Lot 8	19.20	R
			Lot 11	31.50	R
			NESW	40.00	R
		2	Lot 1	4.50	R
			Lot 2	18.30	R
			Lot 3	36.50	R
			Lot 4	21.50	R
			Lot 5	3.00	R
			Lot 6	27.00	R
			Lot 7	21.45	R
			Lot 8	35.80	R
			Lot 9	48.00	R
			W2SW	80.00	R
		3	Lot 3	28.78	R
			Lot 4	28.75	R
			Lot 6	49.00	R
			Lot 8	33.20	R
			E2	292.26	R
			NESW	40.00	R
		4	Lot 1	24.00	R
			Lot 3	28.89	R ³
			Lot 4	28.85	R ³
			SWNW	40.00	R ³
			NWSW	40.00	R ³
		5	E2	297.98	R ³
			Lot 4	29.37	R ³
		6	Lot 1	29.51	R ³
			Lot 2	29.64	R ³
			Lot 3	29.77	R ³
			Lot 4	26.79	R ³
			Lot 5	35.87	R ³
			Lot 6	35.89	R ³
			SENW	40.00	R ³
			SWSE	40.00	R ³
		9	Lot 1	2.50	R ³
			Lot 2	27.00	R ³
		10	N2NE	80.00	R
			SENE	40.00	R
			NESE	40.00	R
		11	NWNW	40.00	R
			E2SE	80.00	R

TABLE B-1 (Continued)
INITIAL LAND CATEGORIZATION

T.	R.	Sec.	Subdivision	Acreage	Category
Dunn (cont.)					
148 N.	97 W.	12	Lot 1	21.50	R
			Lot 2	8.05	R
			SW	160.00	R
			W2SE	80.00	R
		13	W2NE	80.00	R
			SENE	40.00	R
			NW	160.00	R
			S2	320.00	R
		14	E2	320.00	R
		15	Lot 4	22.50	R ³
			Lot 5	24.80	R ³
			Lot 10	35.50	R ³
			Lot 11	11.25	R ³
			Lot 12	10.00	R ³
		19	Lot 4	37.15	R ³
			SESW	40.00	R ³
			SWSE	40.00	R ³
		21	Lot 2	9.60	R ³
		22	Lot 2	23.60	R ³
		23	E2SW	80.00	R
			SE	160.00	R
		24	All	640.00	R
		25	W2	320.00	R
		26	N2NE	80.00	R
			SENE	40.00	R
			NENW	40.00	R
			S2SW	80.00	R ³
			E2SE	80.00	R
		27	E2	320.00	R ³
		28	Lot 1	26.80	R ³
			Lot 8	24.50	R ³
			SWNW	40.00	R ³
		29	S2NE	80.00	R ³
			E2SW	80.00	R ³
			N2SE	80.00	R ³
			SWSE	40.00	R ³
		30	Lot 2	37.27	R ³
			Lot 3	37.33	R ³
			Lot 4	37.41	R ³
			SESW	40.00	R ³
			SWSE	40.00	R ³
		31	Lot 6	48.25	R ³
			N2NE	80.00	R ³
			SWNE	40.00	R ³
			W2	326.68	R ³
			NWSE	40.00	R ³
		32	W2NE	80.00	R ³
			N2NW	80.00	R ³
		33	Lot 3	17.50	R ³
			Lot 6	29.80	R ³
			Lot 8	16.10	R ³
TOTAL ACREAGE				15,989.22	
Eddy					
149 N.	63 W.	27	Lot 1	10.82	D ⁵
150 N.	63 W.	14	Lot 1	2.78	D ⁴
		19	Lot 1	0.25	D
		26	NESW	40.00	D ⁴
TOTAL ACREAGE				53.85	
Emmons					
135 N.	74 W.	6	Lot 1	46.13	D ^{4, 6}
136 N.	74 W.	32	S2NE	80.00	D ^{4, 6}
			S2NW	80.00	D ^{4, 6}
			S2	320.00	D ^{4, 6}
135 N.	77 W.	30	NENE	40.00	D
134 N.	78 W.	5	Lot 6	12.83	D
		7	Lot 10	17.80	D
135 N.	78 W.	33	Lot 2	2.49	D
TOTAL ACREAGE				599.25	
Golden Valley					
142 N.	103 W.	32	SENW	40.00	D

TABLE B-1 (Continued)
INITIAL LAND CATEGORIZATION

T.	R.	Sec.	Subdivision	Acreege	Category
Golden Valley (cont.)					
144 N.	103 W.	4	Lot 1	31.75	D ⁵
			Lot 2	32.05	D ⁵
			Lot 3	32.35	D ⁵
			Lot 4	32.65	D ⁵
			Lot 5	40.00	D ⁵
			Lot 6	40.00	D ⁵
			Lot 7	40.00	D ⁵
			Lot 8	40.00	D ⁵
			S2SW	80.00	D ⁵
			SE	160.00	D ⁵
		6	Lot 1	33.76	D ⁵
			Lot 2	34.80	D ⁵
			Lot 7	40.00	D ⁵
			Lot 8	40.00	D
			Lot 9	40.00	D
			Lot 10	40.00	D
			Lot 11	40.00	D ⁵
			SE	160.00	D ⁵
		8	NWNE	40.00	D
			NW	160.00	D
			N2SW	80.00	D
			SWSW	40.00	D
		18	Lot 1	26.35	D
			Lot 2	26.57	D
			NE	160.00	D
			NESE	40.00	D
			S2SE	80.00	D
		20	E2E2	160.00	D
		32	NWNW	40.00	D
			E2SW	80.00	D
139 N.	104 W.	6	SESE	40.00	D
		30	Lot 2	37.15	D
144 N.	104 W.	2	Lot 2	37.06	D
			Lot 3	36.86	D
			Lot 4	36.66	D
			Lot 5	40.00	D
			Lot 6	40.00	D
			Lot 12	40.00	D
143 N.	105 W.	4	SESE	40.00	D
		18	SESE	40.00	D
		20	E2NE	80.00	D
TOTAL ACREAGE				2398.01	
Grand Forks					
151 N.	52 W.	13	SESW	40.00	D ⁵
TOTAL ACREAGE				40.00	
Grant					
131 N.	84 W.	2	Lot 10	7.85	D
		30	Lot 14	0.87	D
130 N.	85 W.	10	Lot 1	2.80	D
			Lot 2	2.10	D
130 N.	86 W.	26	Lot 1	7.96	D
		30	Lot 2	38.28	D ⁵
131 N.	86 W.	22	E2SW	80.00	D ⁵
			SE	160.00	D ⁵
134 N.	86 W.	4	S2SW	80.00	D ⁵
135 N.	86 W.	34	NWNW	40.00	D
129 N.	87 W.	8	Lot 1	1.20	D
		9	Lot 2	0.08	D
132 N.	87 W.	32	N2NW	80.00	D ⁵
132 N.	88 W.	24	SENE	40.00	D ⁵
134 N.	88 W.	30	Lot 1	0.61	D
130 N.	89 W.	34	NWNE	40.00	D ⁵
130 N.	90 W.	27	Lot 4	0.50	D
		28	Lot 3	1.50	D ²
TOTAL ACREAGE				583.75	

TABLE B-1 (Continued)
INITIAL LAND CATEGORIZATION

T.	R.	Sec.	Subdivision	Acreege	Category
Kidder					
139 N.	70 W.	10	Lot 4	7.54	D
144 N.	70 W.	28	SWSW	40.00	D
137 N.	71 W.	24	Lot 5	8.58	D ^{4, 5}
140 N.	71 W.	6	SENE	40.00	D ^{4, 5, 6}
			SE	160.00	D ^{4, 5, 6}
144 N.	71 W.	28	Lot 3	15.50	D ⁴
138 N.	72 W.	4	NE	158.89	D ^{4, 5}
			S2NW	80.00	D ^{4, 5}
			SW	160.00	D ^{4, 5}
		8	NENE	40.00	D ^{4, 5}
		18	NW	156.32	D ^{4, 5}
140 N.	72 W.	14	Lot 1	32.00	D ^{4, 5}
			Lot 2	36.80	D ^{4, 5}
		22	SENE	40.00	D ⁴
			SE	160.00	D ⁴
141 N.	72 W.	22	Lot 1	25.20	D ⁴
142 N.	72 W.	34	NESE	40.00	D ⁴
143 N.	72 W.	4	Lot 5	0.22	D ⁴
		6	Lot 3	22.00	D ⁴
		28	Lot 3	2.48	D ⁴
138 N.	73 W.	12	NWNE	40.00	D ⁴
			SESE	40.00	D ⁴
		14	S2N2	160.00	D ⁴
143 N.	74 W.	4	Lot 1	27.40	D ⁴
			Lot 2	26.40	D ⁴
144 N.	74 W.	12	Lot 4	0.67	D ⁴
TOTAL ACREAGE				1520.00	
Logan					
136 N.	68 W.	30	NWNE	40.00	D ^{1, 6}
134 N.	69 W.	14	NWNW	40.00	D ^{4, 6}
			W2SW	80.00	D ^{4, 6}
		34	NWNE	40.00	D ^{4, 6}
			NENW	40.00	D ^{4, 6}
135 N.	69 W.	28	N2NE	80.00	D ^{4, 5, 6}
		32	NE	160.00	D ^{4, 6}
136 N.	69 W.	8	SWNE	40.00	D ^{4, 6}
135 N.	70 W.	8	NESWSWSW	2.50	D
TOTAL ACREAGE				522.50	
McHenry					
152 N.	75 W.	2	Lot 2	47.64	D
153 N.	75 W.	3	Lot 6	18.70	D ^{4, 6}
		25	NESW	40.00	D ⁶
		31	Lot 2	14.30	D ^{4, 6}
			Lot 4	15.40	D ^{4, 6}
154 N.	75 W.	17	SESW	40.00	D ⁵
		18	Lot 4	38.22	D ⁵
			SESW	40.00	D ⁵
		19	NWNE	40.00	D ⁵
			W2	313.20	D ⁵
		30	Lot 3	38.12	D ⁵
155 N.	75 W.	6	SENE	40.00	D ⁶
		19	Lot 3	34.52	D ⁶
		23	S2NW	80.00	D ^{4, 6}
			NESW	40.00	D ^{4, 6}
			NWSE	40.00	D ^{4, 6}
		29	W2NE	80.00	D
			E2NW	80.00	D
			N2SW	80.00	D ⁶
		31	NWSE	40.00	D
		33	NESW	40.00	D
157 N.	75 W.	15	SWSW	40.00	D
153 N.	76 W.	2	E2SW	80.00	D
154 N.	76 W.	24	NENE	40.00	D
		25	S2NE	80.00	D
			N2SE	80.00	D
		26	S2NE	80.00	D
		35	NENE	40.00	D

TABLE B-1 (Continued)
INITIAL LAND CATEGORIZATION

T.	R.	Sec.	Subdivision	Acreage	Category
McHenry (cont.)					
155 N.	76 W.	10	NESW	40.00	D
		14	SENE	40.00	D
		23	N2NW	80.00	D ⁶
			SENW	40.00	D
			NESW	40.00	D
			NWSE	40.00	D ⁶
152 N.	77 W.	23	SWNE	40.00	D ^{4, 5, 6}
153 N.	77 W.	23	SWSE	40.00	D ⁶
		25	E2SW	80.00	D ^{4, 6}
154 N.	77 W.	3	Lot 1	39.04	D ⁵
			SENE	40.00	D ⁵
155 N.	77 W.	5	W2NE	80.42	D
		7	SWSE	40.00	D
		9	NWSE	40.00	D
		18	NENE	40.00	D
156 N.	77 W.	10	NWSW	40.00	D ⁶
		15	NWNE	40.00	D
		28	N2SW	80.00	D
			SWSW	40.00	D
			NWSE	40.00	D
		31	Lot 1	35.83	D ⁵
			Lot 2	35.51	D ⁵
151 N.	78 W.	23	NESE	40.00	D ^{4, 6}
		24	NWNW	40.00	D ^{4, 5, 6}
		35	Lot 1	2.06	D
152 N.	78 W.	15	SESW	40.00	D ^{4, 6}
			SWSE	40.00	D ^{4, 6}
		22	N2NE	80.00	D ^{4, 6}
			S2NE	80.00	D ^{4, 6}
			NW	160.00	D ^{4, 6}
			N2SE	80.00	D ^{4, 6}
TOTAL ACREAGE				3232.96	
McIntosh					
129 N.	68 W.	12	NWNE	40.00	D ^{4, 6}
130 N.	68 W.	24	Lot 6	39.80	D ^{4, 6}
			SWNE	40.00	D ^{4, 6}
			NWSE	40.00	D ^{4, 6}
132 N.	68 W.	20	NENE	40.00	D ^{4, 6}
132 N.	72 W.	6	Lot 1	12.84	D ⁴
TOTAL ACREAGE				212.64	
McKenzie					
152 N.	93 W.	8	Lot 4	14.95	D
153 N.	94 W.	3	Lot 3	2.22	D ⁴
153 N.	93 W.	28	Lot 5	38.30	D ⁴
			Lot 6	31.40	D ⁴
			Lot 7	25.70	D ⁴
			Lot 8	16.50	D ⁴
			S2SW	80.00	D ⁴
149 N.	95 W.	1	Lot 1	48.10	D
		10	SESE	40.00	D
150 N.	95 W.	24	Lot 4	46.99	D
		25	Lot 1	47.11	D
152 N.	98 W.	5	Lot 10	40.00	D
			Lot 11	40.00	D
			Lot 12	40.00	D
153 N.	98 W.	24	SWSE	40.00	D ⁵
		25	W2NE	80.00	D ⁵
147 N.	99 W.	22	NWNW	40.00	D
149 N.	99 W.	35	NENE	40.00	D
152 N.	100 W.	24	SENW	40.00	D
			SWSW	40.00	D
			SESE	40.00	D
		25	W2NW	80.00	D
152 N.	100 W.	26	NENW	40.00	D
153 N.	100 W.	6	Lot 9	20.70	D ⁴
		18	Lot 3	39.85	D
			NESW	40.00	D
153 N.	101 W.	10	SESE	40.00	D

TABLE B-1 (Continued)
INITIAL LAND CATEGORIZATION

T.	R.	Sec.	Subdivision	Acreage	Category
McKenzie (cont.)					
149 N.	102 W.	17	NESE	40.00	D
152 N.	102 W.	21	Lot 5	1.01	D
152 N.	103 W.	13	Lot 6	25.00	D ²
			Lot 7	31.10	D ²
		14	Lot 5	3.75	D ²
151 N.	104 W.	26	Lot 1	9.00	D
			Lot 4	31.70	D
		35	SWNE	10.00	D
(portion north of RR)					
152 N.	104 W.	21	Lot 7	17.50	D ²
		22	Lot 3	6.60	D ²
			Lot 4	10.00	D ²
		27	Lot 3	1.63	D ²
		30	Lot 1	34.13	D
TOTAL ACREAGE				1313.24	
McLean					
150 N.	79 W.	26	SENW	40.00	D
143 N.	81 W.	6	Lot 1	15.84	D ⁴
			Lot 2	4.29	D ⁴
		18	Lot 3	23.50	D ⁴
		30	Lot 1	2.40	D ⁴
148 N.	81 W.	19	Lot 9	1.80	D ⁴
144 N.	83 W.	30	Lot 4	42.10	D ⁴
144 N.	84 N.	8	Lot 1	20.60	D ²
			Lot 2	25.60	D ²
			Lot 3	17.80	D ²
145 N.	84 W.	34	Lot 3	15.60	D ²
			Lot 4	15.00	D ²
146 N.	84 W.	32	Lot 1	25.58	D ²
			Lot 4	26.22	D ²
			Lot 5	33.13	D ²
			Lot 8	9.74	D ²
149 N.	84 W.	11	E2SW	80.00	D ^{4, 6}
150 N.	84 W.	27	NWSE	40.00	D ^{4, 5, 6}
150 N.	85 W.	1	Lot 1	0.20	D ⁴
150 N.	86 W.	21	NESE	40.00	D ^{4, 5, 6}
		22	S2NW	80.00	D ^{4, 5, 6}
			NWSW	40.00	D ^{4, 5, 6}
TOTAL ACREAGE				599.40	
Mercer					
144 N.	84 W.	14	Lot 5	17.40	D ²
			Lot 6	14.10	D ²
			Lot 7	16.80	D ²
			Lot 8	15.70	D ²
		24	Lot 5	12.60	D ²
			Lot 6	41.70	D ²
			Lot 7	20.50	D ²
			Lot 8	25.90	D ²
			W2SW	80.00	D ²
146 N.	84 W.	18	Lot 2	12.54	D ²
			Lot 3	17.88	D ²
			Lot 6	25.44	D ²
			Lot 7	38.45	D ²
146 N.	87 W.	6	SENW	40.00	D
143 N.	89 W.	34	NWSW	40.00	D
142 N.	90 W.	4	NESW	40.00	D
TOTAL ACREAGE				459.01	
Morton					
134 N.	80 W.	24	Lot 10	17.40	D ⁴
		28	Lot 12	2.40	D
137 N.	79 W.	33	Lot 4	19.70	D ⁴
137 N.	80 W.	9	Lot 9	24.30	D ²
		18	Lot 7	1.00	D ²
135 N.	81 W.	6	Lot 6	34.84	D
			NESW	40.00	D
		24	Lot 1	5.02	D ²

TABLE B-1 (Continued)
INITIAL LAND CATEGORIZATION

T.	R.	Sec.	Subdivision	Acreage	Category
Morton (cont.)					
133 N.	82 W.	22	Lot 7	15.96	D ²
138 N.	85 W.	2	Lot 1	38.79	D ⁵
TOTAL ACREAGE				199.41	
Mountrail					
155 N.	88 W.	20	Lot 4	6.87	D ^{4,6}
156 N.	88 W.	17	SWNE	40.00	D ^{1,6}
156 N.	89 W.	3	SENE	40.00	D ⁶
		7	Lot 1	7.10	D ^{4,6}
			Lot 2	8.70	D ^{4,6}
		27	NWNE	40.00	D ⁶
157 N.	89 W.	29	Lot 1	16.80	D ^{4,6}
		32	Lot 1	1.10	D ⁴
152 N.	90 W.	5	SWSE	40.00	D ⁶
153 N.	90 W.	20	NENE	40.00	D ⁶
156 N.	90 W.	20	SESW	40.00	D ^{4,6}
			SWSE	40.00	D ^{4,6}
158 N.	90 W.	18	SENE	40.00	D ^{1,6}
154 N.	91 W.	4	Lot 4	40.05	D ⁶
			SWNE	40.00	D ⁶
			NWSW	40.00	D ⁶
155 N.	91 W.	7	NWSE	40.00	D ⁶
156 N.	91 W.	5	Lot 4	60.55	D ^{4,6}
		13	W2NE	80.00	D ^{4,6}
157 N.	91 W.	34	Lot 2	17.30	D ^{4,6}
154 N.	92 W.	31	Lot 1	38.85	D ⁶
153 N.	93 W.	13	SESW	40.00	D ⁶
		26	SENE	40.00	D
			NESE	40.00	D
154 N.	94 W.	10	NESW	40.00	D ⁶
		20	NWNW	40.00	D ⁶
		25	NWSW	40.00	D
155 N.	94 W.	15	SWNE	40.00	D ⁶
		35	SWNW	40.00	D ⁶
TOTAL ACREAGE				1037.32	
Oliver					
141 N.	81 W.	2	Lot 4	14.50	D ⁴
		12	Lot 7	23.50	D ²
TOTAL ACREAGE				38.00	
Pierce					
157 N.	72 W.	18	NWNE	40.00	D
		23	Lot 5	0.32	D ^{4,6}
152 N.	73 W.	5	Lot 10	0.15	D ^{4,6}
		21	NWNW	40.00	D
152 N.	74 W.	8	Lot 1	4.57	D ^{4,5,6}
			Lot 5	24.50	D ^{4,5,6}
			Lot 6	16.80	D ^{4,5,6}
154 N.	74 W.	30	NESW	40.00	R ^{4,6}
TOTAL ACREAGE				166.34	
Renville					
158 N.	86 W.	30	Lot 2	38.31	D
		33	SWNW	40.00	D
TOTAL ACREAGE				78.31	
Sheridan					
145 N.	74 W.	26	SENE	40.00	D ^{4,6}
			NESE	40.00	D ^{4,6}
150 N.	75 W.	14	S2NW	80.00	D ^{4,6}
149 N.	77 W.	2	Lot 7	13.40	D ^{4,6}
150 N.	77 W.	13	Lot 1	17.70	D ^{4,6}
		17	SWSW	40.00	D ^{4,6}
		20	Lot 1	11.40	D ^{4,6}
			Lot 2	9.50	D ^{4,6}
		28	Lot 2	32.30	D ^{4,6}
		35	Lot 2	13.70	D ^{4,6}
147 N.	78 W.	1	Lot 3	40.20	D

TABLE B-1 (Continued)
INITIAL LAND CATEGORIZATION

T.	R.	Sec.	Subdivision	Acreage	Category
Sheridan (cont.)					
148 N.	78 W.	23	SWNE	40.00	D
TOTAL ACREAGE				378.20	
Stutsman					
138 N.	67 W.	8	NENW	40.00	D ^{4,6}
138 N.	68 W.	10	SWSE	40.00	D ^{4,6}
TOTAL ACREAGE				80.00	
Walsh					
157 N.	50 W.	8	Lot 1	10.94	D ⁵
TOTAL ACREAGE				10.94	
Ward					
151 N.	84 W.	29	NESW	40.00	D ^{4,6}
153 N.	86 W.	4	Lot 4	0.93	D ⁴
		5	Lot 1	22.20	D ^{4,6}
			Lot 5	25.60	D ^{4,6}
		7	Lot 2	0.37	D ⁴
152 N.	87 W.	1	Lot 6	16.50	D ^{4,6}
		4	SESW	40.00	D ^{4,6}
		9	NENW	40.00	D ^{4,6}
155 N.	87 W.	8	NWSW	40.00	D ^{4,6}
159 N.	87 W.	32	NESW	40.00	D
TOTAL ACREAGE				265.60	
Williams					
154 N.	95 W.	7	Lot 2	36.81	D ⁵
			Lot 3	36.87	D ⁵
			Lot 4	36.93	D ⁵
		10	N2SE	80.00	D ⁶
		28	SENE	40.00	D ⁴
154 N.	96 W.	12	SENE	40.00	D ⁵
			NESE	40.00	D ⁵
154 N.	97 W.	17	SWNE	40.00	D ⁶
155 N.	97 W.	21	SESE	40.00	D ⁶
154 N.	100 W.	33	SESE	40.00	D ⁵
159 N.	100 W.	22	SENE	40.00	D ^{4,5,6}
			SENE	40.00	D ^{4,5,6}
			NESW	40.00	D ^{4,5,6}
			S2SW	80.00	D ^{4,5,6}
			N2SE	80.00	D ^{4,5,6}
			SWSE	40.00	D ^{4,5,6}
154 N.	101 W.	29	SWSE	10.00	D ^{2,6}
				(Portion north of RR)	
156 N.	102 W.	14	NESW	40.00	D ⁶
			NWSE	40.00	D ⁶
152 N.	103 W.	20	Lot 1	37.00	D ²
			Lot 3	14.00	D ²
		21	Lot 5	22.00	D ²
153 N.	103 W.	9	NWNE	40.00	D ⁶
		26	SWNW	40.00	D ^{5,6}
			NESW	40.00	D ^{5,6}
		27	NESW	40.00	D ^{5,6}
152 N.	104 W.	5	SWSW	30.27	D
				(portion of)	
		14	Lot 1	40.30	D ²
			Lot 2	27.00	D ²
			Lot 3	20.90	D ²
		15	Lot 1	14.75	D ²
			Lot 2	16.10	D ²
		20	Lot 4	8.10	D ²
		21	Lot 4	11.00	D ²
		23	Lot 1	3.31	D ²
		24	Lot 2	11.80	D ²
			Lot 3	34.25	D ²
153 N.	104 W.	10	Lot 1	29.91	D ⁶
TOTAL ACREAGE				1321.30	

TABLE B-1 (Continued)
INITIAL LAND CATEGORIZATION

T.	R.	Sec.	Subdivision	Acreage	Category
----	----	------	-------------	---------	----------

¹Identified as suitable for mitigating impacts of Garrison Diversion projects.

²Need a cadastral survey determination of acreage and land status.

³Located within Big Gumbo or Lost Bridge consolidation areas. Available for exchange for other lands within either consolidation area.

⁴These areas contain or are adjacent to wetlands. Disposal would be contingent on protection of important wetlands values.

⁵Contain sensitive resources identified by NDGFD and NDPRD.

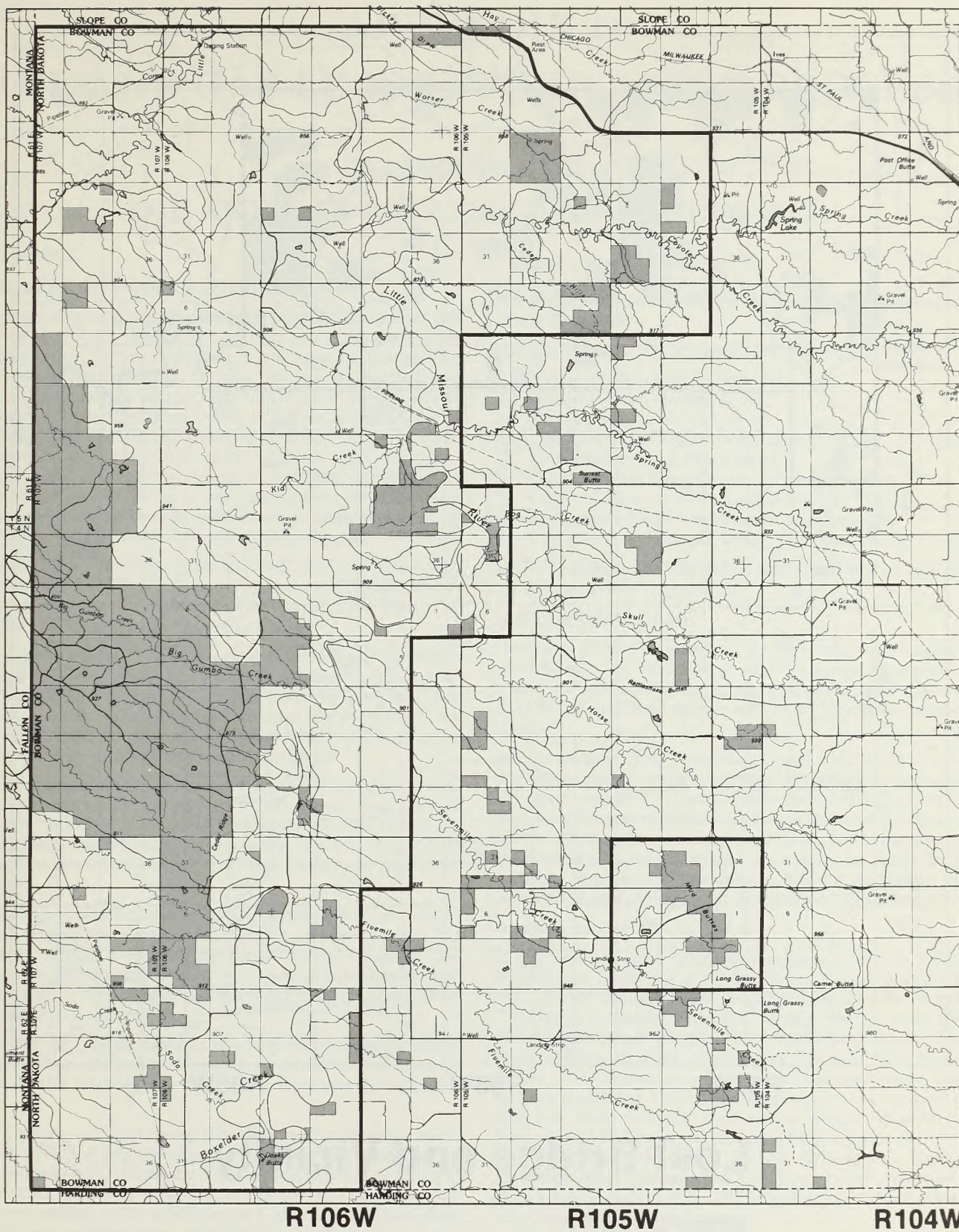
⁶Included in Civil Action No. 85-2238, National Wildlife Federation versus Robert Burford. Action on this tract is pending court ruling.

Note: Table current as of 5-31-88.

APPENDIX C

CONSOLIDATION AREA MAPS





Big Gumbo and Vicinity

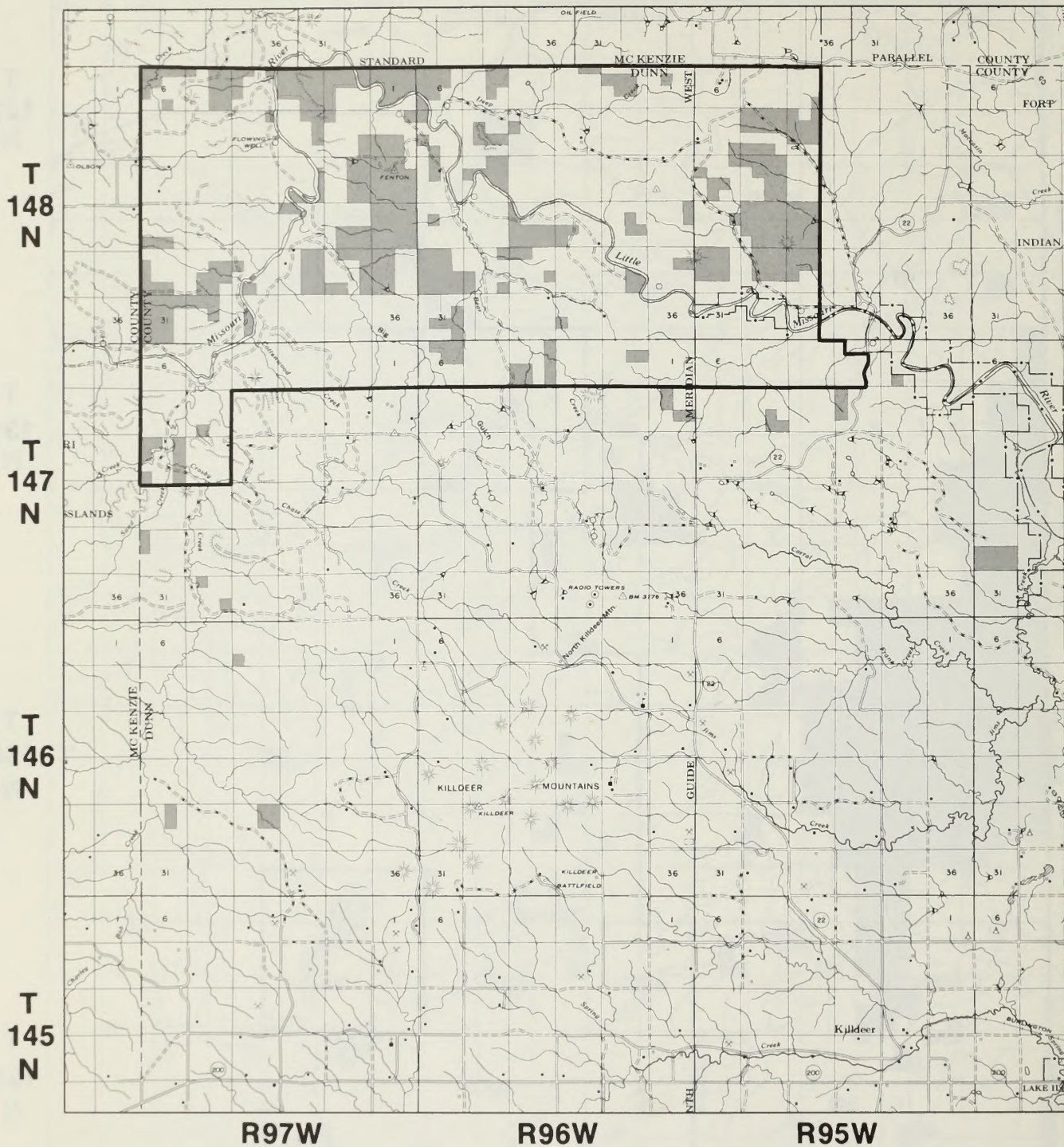


Public lands



Consolidation area boundary

Map C-1



Map C-2

APPENDIX D

OIL AND GAS LEASE STIPULATION PROCESS

APPENDIX D-1

OIL AND GAS PROCESSING PROCEDURES

Application for Permit to Drill Approval:

Although oil and gas operations physically start after the APD is approved, the BLM's oil and gas responsibilities actually begin before the oil and gas lease is issued. The District's responsibilities include review of competitive and noncompetitive leases and nomination of new tracts for leasing with recommendation of special stipulations to be added to these leases. These stipulations cover a wide spectrum of subjects, often ranging from wildlife protection to hydrocarbon-drainage protection, and usually have some effect on the Federal permitting process. Once the leases are issued the lessee, or his designated operator, can then proceed to initiate the permitting process.

An initial step in permitting the well drilling process is approval of an APD. When applying for an APD the operator has two options which can be followed — the Notice of Staking (NOS) option or the APD option.

NOS Option — Prior to filing a complete APD, the operator may, at its option, file a NOS with the authorized officer of the BLM. The notice must include a survey plat, and cut and fill diagrams of all proposed areas of disturbance. If all required information is not included, the NOS is usually returned to the operator for modification.

When a complete NOS is received, a review is performed to identify the need for associated rights-of-way and special use permits, cultural resource clearance, wildlife conflicts, or other associated surface concerns. An onsite predrill inspection must be conducted within 15 days of receipt of the NOS.

During the predrill inspection, the surface use and reclamation stipulations must be developed and provided to the operator, within five working days from the date of the inspection. The operator must then incorporate these stipulations into a technically complete APD and submit it to the authorized officer.

When the APD is received, it is reviewed for completeness and technical adequacy. Once all required information is received, the District has 10 days to approve the application.

APD Option — When using this option, the operator need not file a NOS or any other paperwork prior to submittal of the complete APD. Once the APD is received by the authorized officer, a review must be completed and the operator must be notified as to whether the application is complete or deficient within seven working days of receipt of the application.

An onsite inspection must be conducted with the operator or his representative within 15 days of receipt of the APD to develop the surface use and reclamation stipulations that will be included in the approved application. Under this option the District has 30 days to complete processing of

the APD from the date it is technically and administratively complete.

All applications are reviewed for aspects of:

1. Public Health and Safety
2. Unique Characteristics
3. Environmental Controversy
4. Uncertain and Unknown Risks
5. Establishment of Precedent
6. Cumulatively Significant
7. Cultural Resources and eligibility for NRHP
8. Endangered and Threatened Species and
9. Violations of Federal, State, and Local Law.

If the problems are identified and could not be mitigated, an EIS would be required.

Drilling Operations:

Once the APD is approved, the operator may begin construction of the well pad, access road, and may start drilling the well. The operator is required to report the spud date (date drilling begins) within 48 hours of commencement.

An inspection must be made of each well while it is being drilled to ensure compliance with Federal Regulations and the approved APD. If some aspect of the APD is not being met, an Incident of Noncompliance must be written and a follow-up inspection may be required. Different phases of the drilling at which inspections may be made include: running casing and cementing, setting up safety equipment, testing or logging, or actual drilling operations.

Abandonment Operations:

If the well is dry, the operator must receive plugging instruction from the staff engineers before plugging the well. Even though these instructions may be verbal, a "Notice of Intent to Abandon" and a "Subsequent Report of Abandonment" must be submitted on the Sundry Notice Form within 30 days of plugging the well. The Notice of Intent to Abandon may be approved immediately, but the Subsequent Report of Abandonment must be held until the well has been rehabilitated and a "Final Abandonment Notice" (FAN) has been received. At this point the site will be reinspected. Approval of the Subsequent Report of Abandonment releases the well from bond coverage and closes the District's files. BLM personnel usually inspect the physical plugging process.

Subsequent Well Operations:

If the well is completed as a producer a permanent inspection file is set up, and if possible, the well is inspected at least once annually.

The operator is required to submit "Monthly Reports of Operations," "Well Completion or Recompletion Reports",

and applications for any other sundry work which is not covered by the original APD or the Federal Regulations.

Drainage Protection:

The District is responsible for protecting all Federal or Indian minerals from drainage. Drainage may be caused by state wells, fee or patented wells, other federal wells, or Indian wells. If a case of drainage is suspected, the lessee of the offended tract is notified and reservoir information is solicited. Once all needed information is obtained, a final decision is made and the lessee is again notified of the decision. This decision could involve a determination of "no drainage" or a demand to protect the lease from drainage. The lease could be protected by drilling another well or by paying compensatory royalty.

If the affected oil and gas reserves are unleased, the District recommends to MSO the offended tract be offered for leasing with appropriate drainage protection stipulations.

APPENDIX D-2

OIL AND GAS LEASE STIPULATIONS

UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management
222 North 32nd Street
P.O. Box 36800
Billings, Montana 59107

(Serial Number)

OIL AND GAS LEASE STIPULATIONS

ESTHETICS—To maintain esthetic values, all surface-disturbing activities, semipermanent and permanent facilities may require special design including location, painting and camouflage to blend with the natural surroundings and meet the intent of the visual quality objectives of the Federal Surface Managing Agency (SMA).

EROSION CONTROL—Surface-disturbing activities may be prohibited during muddy and/or wet soil periods.

CONTROLLED OR LIMITED SURFACE USE STIPULATION—This stipulation may be modified, consistent with land use documents, when specifically approved in writing by the Bureau of Land Management (BLM) with concurrence of the SMA. Distances and/or time periods may be made less restrictive depending on the actual onground conditions. The prospective lessee should contact the SMA for more specific locations and information regarding the restrictive nature of this stipulation.

The lessee/operator is given notice that the lands within this lease may include special areas and that such areas may contain special values, may be needed for special purposes, or may require special attention to prevent damage to surface and/or other resources. Possible special areas are identified below. Any surface use or occupancy within such special areas will be strictly controlled, or if **absolutely necessary**, excluded. Use or occupancy will be restricted only when the BLM and/or the SMA demonstrates the restriction necessary for the protection of such special areas and existing or planned uses. Appropriate modifications to imposed restrictions will be made for the maintenance and operations of producing oil and gas wells.

After the SMA has been advised of specific proposed surface use or occupancy on the leased lands, and on request of the lessee/operator, the Agency will furnish further data on any special areas which may include:

100 feet from the edge of the rights-of-way from highways, designated county roads and appropriate federally-owned or controlled roads and recreation trails.

500 feet, or when necessary, within the 25-year flood plain from reservoirs, lakes, and ponds and intermittent, ephemeral or small perennial streams; 1,000 feet, or when necessary, within the 100-year flood plain from larger perennial streams, rivers, and domestic water supplies.

500 feet from grouse strutting grounds. Special care to avoid nesting areas associated with strutting grounds will be necessary during the period from March 1 to June 30. One-fourth mile from identified essential habitat of state and federal sensitive species. Crucial wildlife winter ranges during the period from December 1 to May 15, and in elk calving areas, during the period from May 1 to June 30.

300 feet from occupied buildings, developed recreational areas, undeveloped recreational areas receiving concentrated public use and sites eligible for or designated as National Register sites.

Seasonal road closures, roads for special uses, specified roads during heavy traffic periods and on areas having restrictive off-road vehicle designations.

On slopes over 30 percent, or 20 percent on extremely erodable or slumping soils.

(Date)

(Signature)

See Notice On Back

MT-3109-1 (April 1987)

NOTICE

APPLICATIONS FOR PERMIT TO DRILL (APDs)—The BLM district or resource area offices are responsible for the receipt, processing, and approval of APDs. The APDs are to be submitted by oil and gas operators pursuant to the requirements found in Onshore Oil and Gas Order No. 1 — Approval of Operations on Onshore Federal and Indian Oil and Gas Leases (Circular No. 2538). Additional requirements for the conduct of oil and gas operations on federal oil and gas leases can be found in Code of Federal Regulations Title 43, Part 3160. Copies of Onshore Oil and Gas Order No. 1, and pertinent regulations, can be obtained from the BLM district offices in which the operations are proposed. Early coordination with these offices on proposals is encouraged.

CULTURAL AND PALEONTOLOGICAL RESOURCES—The SMA is responsible for assuring that the leased lands are examined to determine if cultural resources are present and to specify mitigation measures. Prior to undertaking any surface-disturbing activities on the lands covered by this lease, the lessee or operator, unless notified to the contrary by the SMA, shall:

1. Contact the appropriate SMA to determine if a site-specific cultural resource inventory is required. If an inventory is required, then;
2. Engage the services of a cultural resource specialist acceptable to the SMA to conduct a cultural resource inventory of the area of proposed surface disturbance. The operator may elect to inventory an area larger than the area of proposed disturbance to cover possible site relocation which may result from environmental or other considerations. An acceptable inventory report is to be submitted to the SMA for review and approval no later than that time when an otherwise complete application for approval of drilling or subsequent surface-disturbing operation is submitted.
3. Implement mitigation measures required by the SMA. Mitigation may include the relocation of proposed lease-related activities or other protective measures such as testing salvage and recordation. Where impacts to cultural resources cannot be mitigated to the satisfaction of the SMA, surface occupancy on that area must be prohibited.

The lessee or operator shall immediately bring to the attention of the SMA any cultural or paleontological resources discovered as a result of approved operations under this lease, and not disturb such discoveries until directed to proceed by the SMA.

ENDANGERED OR THREATENED SPECIES—The SMA is responsible for assuring that the leased land is examined prior to undertaking any surface-disturbing activities to determine effects upon any plant or animal species, listed or proposed for listing as endangered or threatened, or their habitats. The findings of this examination may result in some restrictions to the operator's plans or even disallow use and occupancy that would be in violation of the Endangered Species Act of 1973 by detrimentally affecting endangered or threatened species or their habitats.

The lessee/operator may, unless notified by the authorized officer of the SMA that the examination is not necessary, conduct the examination on the leased lands at his discretion and cost. This examination must be done by or under the supervision of a qualified resources specialist approved by the SMA. An acceptable report must be provided to the SMA identifying the anticipated effects of a proposed action on endangered or threatened species or their habitats.

This lease is within known golden eagle habitat. A biological assessment of the area may be necessary which could significantly delay processing of an APD. The lessee/operator should allow sufficient lead time to conduct a biological assessment should one be needed.

APPENDIX D-3

SPECIAL LEASE STIPULATIONS AND LEASING RESTRICTIONS

The following stipulations only apply to mineral-related activities in the planning area. **These stipulations represent mitigation measures necessary to avoid or minimize adverse impacts to the human environment (40 CFR 1502.14(f) and 1502.16(h)). Most of the area included under the stipulations involves split estate. In the case of split estate the stipulations do not dictate surface management on private lands but are intended only to provide required protection of important resources that otherwise may be impacted by federal actions.**

The areas of federal oil and gas covered by the following stipulations are portrayed in Map K-1 of the draft. At APD time, negotiations between the surface owner, operator, and BLM may be undertaken to incorporate specific needs of the surface owner. This may result in small adjustments to buffer zones, for example, where adequate protection can be provided without strict adherence to specific distances set forth in the stipulations.

If these special stipulations are not effective in providing the desired degree of resource protection, they may be revised at a future date.

The NSO acreages listed below under Alternative C are approximate totals as of December 1986. They are provided only to give perspective to the possible extent of NSO stipulations at one point in time. Changes in these totals will continually occur as resources change. Other acreages listed under Alternatives C and D are the maximum totals theoretically possible.

Definition

Surface Occupancy — Occupancy of the land surface with pumps, drilling rigs, tank batteries, roads and other facilities that require repeated visits or maintenance.

Exceptions (may be applied to any stipulation **except Threatened and Endangered Species**)

These limitations do not apply to maintenance and operation of producing wells. This stipulation may be waived or reduced if circumstances change, or if the lessee can demonstrate that operations can be conducted without causing unacceptable impacts. Exceptions to this limitation in any particular year may be specifically approved in writing by the authorized officer. **In all cases the stipulation (including any modification) will be designed to present the least restrictive measure for avoiding unacceptable adverse impacts.**

Stipulations and Leasing Restrictions

Threatened and Endangered Species

(All Alternatives)

The Surface Management Agency is responsible for assuring that the leased land is examined prior to undertaking any surface-disturbing activities to determine effects upon any plant or animal species, listed or proposed for listing as endangered or threatened, or their habitats. The findings

of this examination may result in some restrictions to the operator's plans or even disallow use and occupancy that would be in violation of the Endangered Species act of 1973 by detrimentally affecting endangered or threatened species or their habitats.

The lessee/operator shall, unless notified by the authorized officer of the Surface Management Agency that the examination is not necessary, conduct the examination on the leased lands at his cost. This examination must be done by or under the supervision of a qualified resources specialist approved by the Surface Management Agency. An acceptable report must be provided to the Surface Management Agency, identifying the anticipated effects of a proposed action on endangered or threatened species or their habitats.

Elk Winter Range (No elk winter range has been identified as of this date. Stipulation will apply if and when such habitat is identified.)

No seismic exploration, construction, or other development would be allowed on elk winter range between November 30 and May 1.

Elk Calving (No elk calving habitat has been identified as of this date. Stipulation will apply if and when such habitat is identified.)

No seismic exploration, construction, or other development would be allowed on elk calving range between June 1 and July 1.

Sage Grouse

NSO would be allowed within 200 feet of strutting grounds (**40 acres**).

No seismic exploration, construction, or other development would be allowed within two miles of strutting grounds between March 1 and June 30 (**up to 48,705 acres**).

Wetlands

NSO would be allowed within 200 feet of wetlands, lakes and ponds (**up to 57,355 acres**).

No seismic exploration would be allowed within 500 feet of waterfowl nesting habitat between March 1 and July 1.

Ferruginous Hawk

NSO would be allowed within one-half mile of ferruginous hawk nests known to be occupied at least once within the seven previous years (**1200 acres**).

No seismic exploration, construction, or other development would be allowed within 1.2 miles of occupied nests between **March 15** and July 15 (**up to 55,005 acres**).

Prairie Falcon

NSO would be allowed within one-half mile of prairie falcon nests known to be occupied at least once within the seven previous years (**5200 acres**).

No construction, seismic exploration, or other development would be allowed within one-half mile of occupied nests between **March 15** and July 15 (**up to 90,205 acres**).

Golden Eagles

NSO would be allowed within one-half mile of golden eagle nests known to be occupied at least once within the seven previous years (3600 acres).

No construction, seismic exploration, or other development would be allowed within one-half mile of occupied nests between February 15 and July 15 (up to 90,205 acres).

Riparian Habitat

No disturbance of riparian areas of wetlands, intermittent, ephemeral, or perennial streams and rivers would be allowed except for essential road and utility crossings (up to 151,951 acres).

Bighorn Sheep

Bighorn Sheep Winter Range (No bighorn sheep winter range has been identified as of this date. Stipulation will apply if and when such habitat is identified.)

No construction, seismic exploration, or other development would be allowed on bighorn sheep winter range between December 1 and April 1.

Bighorn Sheep Lambing (No bighorn sheep lambing habitat has been identified as of this date. Stipulation will apply if and when such habitat is identified.)

No construction, seismic exploration, or other development would be allowed in bighorn sheep lambing habitat between April 1 and June 15.

Prairie Dog Towns (up to 4,520 acres)

A black-footed ferret inventory may be required prior to any development (up to 4,520 acres). (See Threatened and Endangered species stipulation).

Fort Union Historic Site

If visual impacts of oil and gas development cannot be satisfactorily avoided or mitigated, NSO would be allowed within the visible area within a 3.5 mile radius of the Fort Union Historic Site (380 acres).

Off-Road Vehicles

Between March 1 and June 1 travel will be restricted to maintained roads in the Big Gumbo Area. Exceptions will be allowed for emergency uses if approved by the authorized officer.

Floodplains

NSO would be allowed to protect the floodplain of the Missouri River from possible pollution (694.41 acres).

APPENDIX E

OFF-ROAD VEHICLE USE DESIGNATIONS

A total of 22,164 acres of public land is designated as a seasonally restricted area for off-road travel, and **45,407** acres open to ORV use. **Motorized** ORV use within the Big Gumbo area (Map C-1) would be restricted to maintained roads during the period of March 1 through June 1. Travel necessary for emergency, scientific, and maintenance purposes would be excluded from restrictions.

Off-road travel restrictions were developed to protect fragile vegetation and soils during spring thaw when the risk of impacts is greatest. ORV travel stipulations would be incorporated in all future oil and gas leases. Emergency closures may be implemented when needed.

APPENDIX F

IMPLEMENTATION WORKSHEET

North Dakota Resource Management Plan Implementation Worksheet

RMP Dec. Num. _____ Subj. Res. _____ Lead Spec. _____

RESOURCE OBJECTIVE:

DECISION:

IMPLEMENTATION STEPS AND SCHEDULE:

Steps	Start Date	Completion Date
-------	------------	-----------------

REQUIRED SKILLS MIX, ESTIMATED WORKMONTHS BY STEP:

Step No.	Skills	Workmonths
----------	--------	------------

NECESSARY PROCUREMENT, CONTRACTS, OTHER COSTS:

NECESSARY COORDINATION BY STEP:

Step No.	Key Contact and Agency/Group	Purpose
----------	------------------------------	---------

MONITORING MINI-PLAN:

DATE STARTED _____ PROJ. COMP. DATE _____ DATE COMP. _____

APPENDIX G

PLAN MONITORING ROSTER

Plan Monitoring Roster

Portion of Plan Monitored

Date(s)

Results

What modification (if any) is needed to adjust the plan?

Date _____

Signed _____

Title _____

APPENDIX H
PLAN MAINTENANCE ROSTER

Plan Maintenance Roster

Changes made [page(s) and wording]

Reasons

Date _____

Signed _____

Title _____

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P.O. BOX 25047
DENVER, CO 80225

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Dickinson
resource
plan

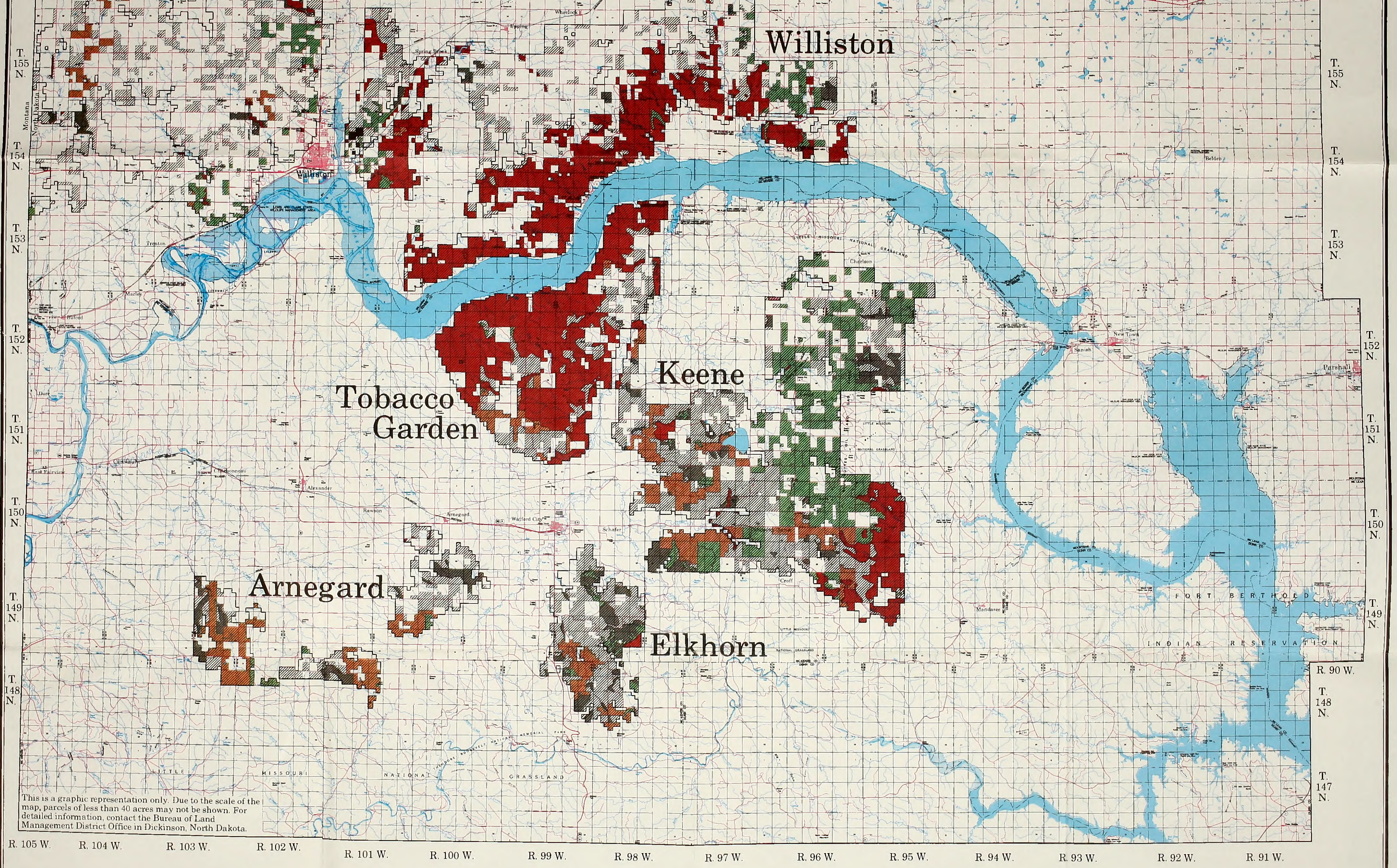
OFFICE		DATE RETURNED

(Continued on reverse)

TD 195 .C58 N677 1988b
U. S. Bureau of Land
Management. Dickinson
North Dakota resource
management plan

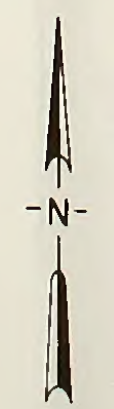
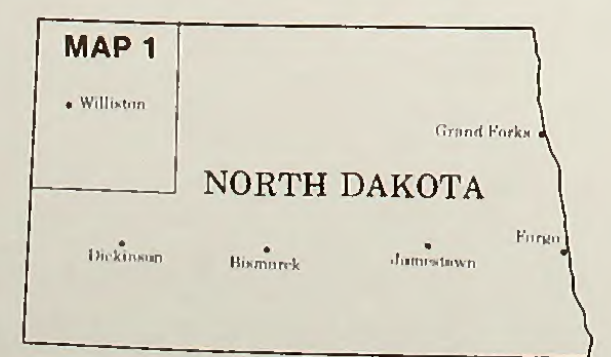
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DENVER, CO 80225



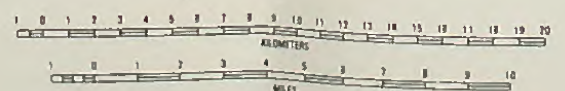


This is a graphic representation only. Due to the scale of the map, parcels of less than 40 acres may not be shown. For detailed information, contact the Bureau of Land Management District Office in Dickinson, North Dakota.

LOCATION MAP



SCALE



LEGEND

- Coal Study Area (CSA) Boundary
- Unsuitability Criteria (Coal Excluded from Further Consideration for Leasing or Exchange)
- Multiple-use Tradeoffs (Coal Excluded from Further Consideration for Leasing or Exchange)
- Multiple-use Tradeoffs — Wildlife Threshold (Coal Acceptable for Further Consideration Until Threshold is Reached)
- Significant Surface Owner Opposition (Coal Excluded from Further Consideration for Leasing or Exchange)
- Federal Coal
- Existing Federal Coal Leases
- National Grasslands (Not included in CSAs)

Unsuitability criterion 3 and some areas of multiple-use tradeoff have not been portrayed. Acreages excluded under these screens are presented in Appendix B of the North Dakota RMP.



U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management

1988
NORTH DAKOTA
RESOURCE MANAGEMENT PLAN
APPLICATION OF COAL SCREENS
Map 1 — Williston Area
Dickinson District
North Dakota



R. 93 W. R. 92 W. R. 91 W. R. 90 W. R. 89 W. R. 88 W. R. 87 W. R. 86 W. R. 85 W. R. 84 W. R. 83 W. R. 82 W. R. 81 W. R. 80 W. R. 79 W.

T. 154 N.
T. 153 N.
T. 152 N.
T. 151 N.
T. 150 N.
T. 149 N.
T. 148 N.
T. 147 N.
T. 146 N.
T. 145 N.
T. 144 N.
T. 143 N.

T. 154 N.
T. 153 N.
T. 152 N.
T. 151 N.
T. 150 N.
T. 149 N.
T. 148 N.
T. 147 N.
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T. 145 N.
T. 144 N.
T. 143 N.

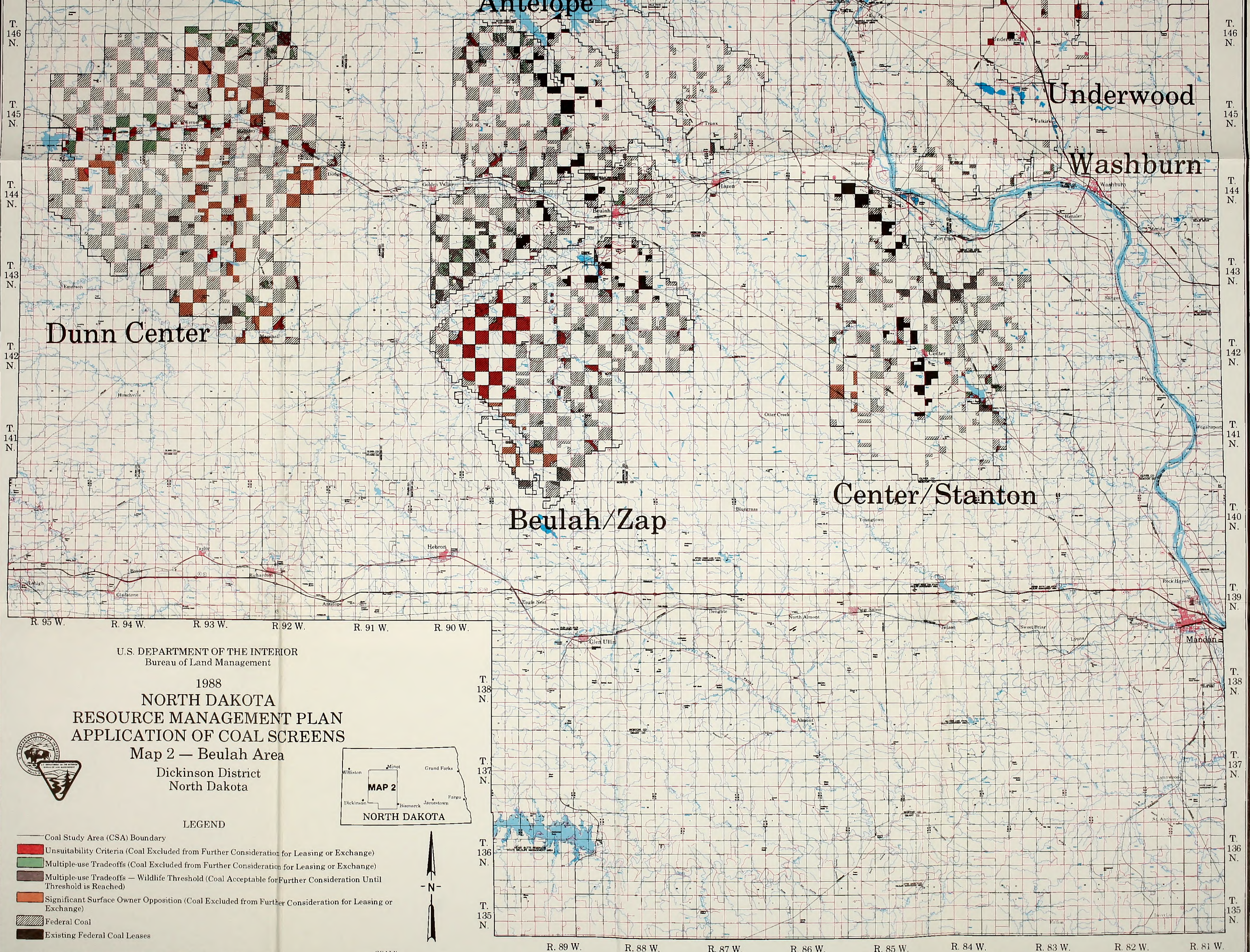
Garrison

Velva

Antelope

Underwood

Washburn



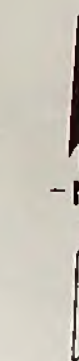
Unsuitability criterion 3 and some areas of multiple-use tradeoff have not been portrayed. Acreages excluded under these screens are presented in Appendix B of the North Dakota RMP.

This is a graphic representation only. Due to the scale of the map, parcels of less than 40 acres may not be shown. For detailed information, contact the Bureau of Land Management District Office in Dickinson, North Dakota.

R. 105 W. R. 104 W. R. 103 W. R. 102 W. R. 101 W. R. 100 W. R. 99 W. R. 98 W. R. 97 W. R. 96 W. R. 95 W. R. 94 W. R. 93 W. R. 92 W.

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management

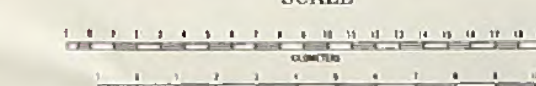
1988
NORTH DAKOTA
RESOURCE MANAGEMENT PLAN
APPLICATION OF COAL SCREENS
Map 3 — Dickinson Area
Dickinson District
North Dakota



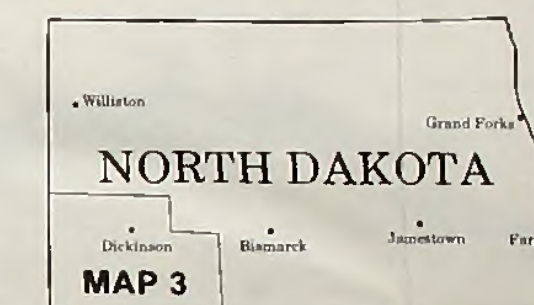
LEGEND

- Coal Study Area (CSA) Boundary
- Unsuitability Criteria (Coal Excluded from Further Consideration for Leasing or Exchange)
- Multiple-use Tradeoffs (Coal Excluded from Further Consideration for Leasing or Exchange)
- Multiple-use Tradeoffs — Wildlife Threshold (Coal Acceptable for Further Consideration Until Threshold is Reached)
- Significant Surface Owner Opposition (Coal Excluded from Further Consideration for Leasing or Exchange)
- Federal Coal
- Existing Federal Coal Leases

SCALE



Unsuitability criterion 3 and some areas of multiple-use tradeoff have not been portrayed. Acres excluded under these screens are presented in Appendix B of the North Dakota RMP.



575-745-8 (10-83)

Golden Valley

Dickinson

New England

Elgin/New Leipzig

Mott

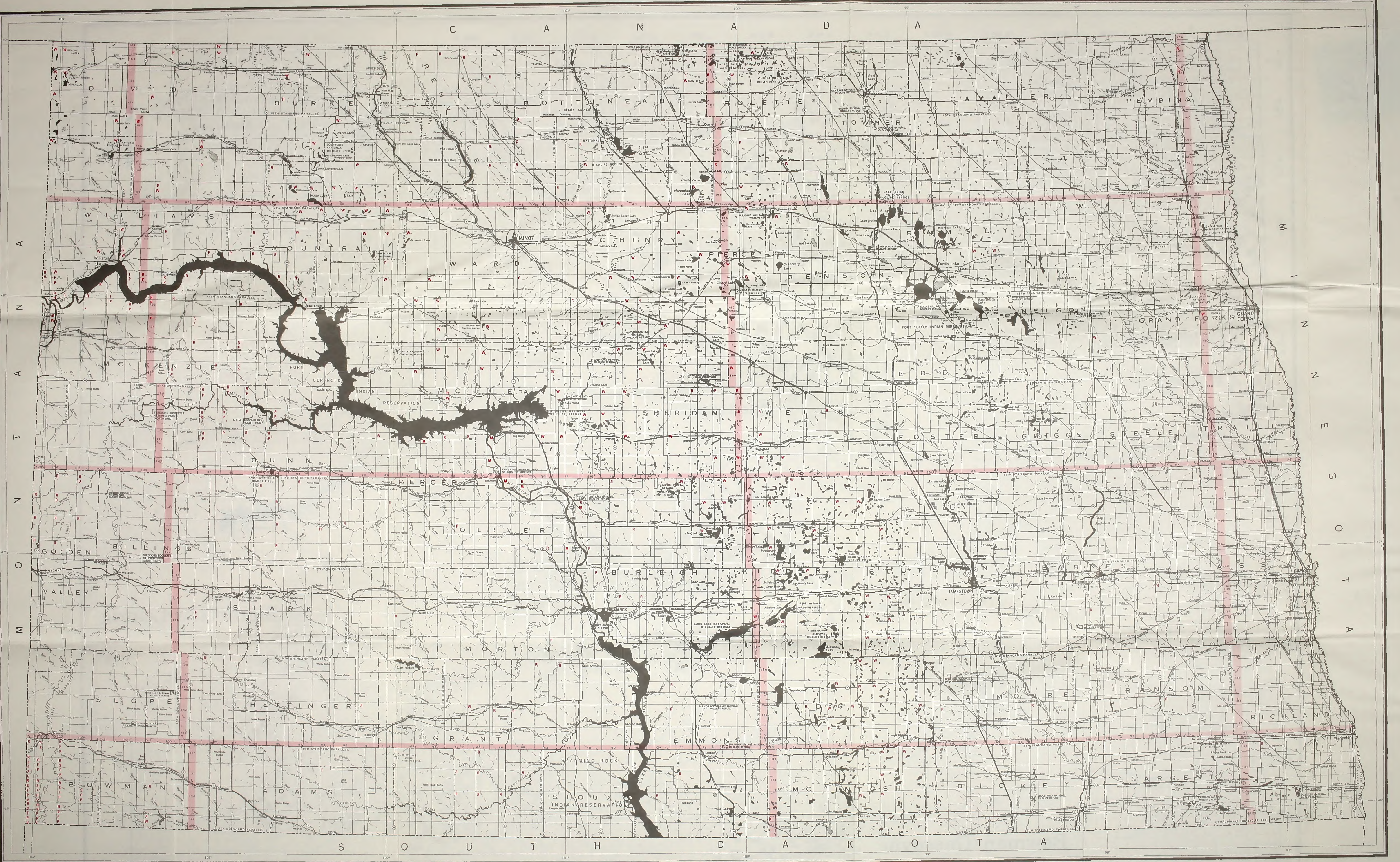
Bowman/Gascoyne

This is a graphic representation only. Due to the scale of the map, parcels of less than 40 acres may not be shown. For detailed information, contact the Bureau of Land Management District Office in Dickinson, North Dakota.

T. 144 N.
T. 143 N.
T. 142 N.
T. 141 N.
T. 140 N.
T. 139 N.
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T. 137 N.
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T. 132 N.
T. 131 N.
T. 130 N.

R. 107 W. R. 106 W. R. 105 W. R. 104 W. R. 103 W. R. 102 W. R. 101 W. R. 100 W. R. 99 W. R. 98 W. R. 97 W. R. 96 W. R. 95 W. R. 94 W. R. 93 W. R. 92 W. R. 91 W. R. 90 W. R. 89 W. R. 88 W.



NORTH DAKOTA RESOURCE MANAGEMENT PLAN OIL AND GAS LEASE STIPULATION AND REVIEW AREAS

**Bureau of Land Management
Dickinson District
1988**

The need for oil and gas lease stipulations and/or special review areas is indicated within a township when a stipulation is identified as a possible stipulation in a township means that there is at least one parcel of Federal oil and gas within that township that will require special review for the identified stipulation. In all cases, stipulations will only be applied to leases where necessary.

LEGEND

- SAGE GROUSE** — No surface occupancy or use within 200 feet of sage grouse strutting grounds. No seismic exploration, construction, or other development within two miles of sage grouse strutting grounds during the period March 1 through June 30.
- FERRUGINOUS HAWK** — No surface occupancy or use within one-half mile of ferruginous hawk nests known to have been occupied at least once within the previous seven years. No seismic exploration, construction, or other development within 1.2 miles of occupied nests during the period March 15 through July 15.
- PRAIRIE FALCON** — No surface occupancy or use within one-half mile of prairie falcon nests known to have been occupied at least once within the previous seven years. No seismic exploration, construction, or other development within one-half mile of occupied nests during the period March 15 through July 15.
- GOLDEN EAGLE** — No surface occupancy or use within one-half mile of golden eagle nests known to have been occupied at least once within the previous seven years. No seismic exploration, construction, or other development within one-half mile of occupied nests during the period February 15 through July 15.

- FORT UNION HISTORIC SITE** — No surface occupancy or use within the visible area within a 3.5 mile radius unless the lessee demonstrates to the Authorized Officer that visual impacts can be satisfactorily avoided or otherwise mitigated.
- MISSOURI RIVER FLOODPLAIN** — No surface occupancy or use within the Missouri River floodplain.
- WETLANDS** — No surface occupancy or use within 200 feet of wetlands, lakes, and ponds. No seismic exploration within 500 feet of waterfowl nesting habitat during the period March 1 through July 1.
- WATERFOWL WINTERING HABITAT** — No disturbance of riparian areas of wetlands, watercourses, upland ridges, or perennial streams and rivers will be allowed except for access to road and utility crossings.
- OFF-ROAD EFFECTS** — Motor vehicle travel is restricted to maintained roads during the period March 1 through June 1. Exceptions will be allowed for emergency or nonadversely circumvented as approved by the Authorized Officer.

LEASE NOTICE

- PRAIRIE DOG TOWNS** — A black-footed ferret inventory may be required prior to any development.

STIPULATION REVIEW AREAS NOT MAPPED

- The following stipulations will be applied if the situations arise. As of the date of this document, no overlap between these resources and Federal oil and gas was known to occur.
- NATURAL AREAS** — No surface occupancy or use on Federally designated natural areas, state-designated nature preserves, or state-managed natural areas.
 - ELK WINTER RANGE** — No seismic exploration, construction, or other development on elk winter range during the period November 30 through May 1.
 - ELK CALVING RANGE** — No seismic exploration, construction, or other development on elk calving range during the period June 1 through July 1.
 - BIGHORN SHEEP WINTER RANGE** — No seismic exploration, construction, or other development on bighorn sheep winter range during the period December 1 through April 1.
 - BIGHORN SHEEP LAMBING RANGE** — No seismic exploration, construction, or other development on bighorn sheep lambing range during the period April 1 through June 15.

LEGEND

- State capital
- County seat
- City, town, or village
- Scheduled service airport
- Interstate highway
- U. S. highway
- State highway
- Other grouped roads

POPULATION KEY

FARGO	more than 30,000
BISMARCK	15,000 to 30,000
DICKINSON	5,000 to 15,000
GRAND FORKS	1,000 to 5,000
Other	less than 1,000

Population indicated by size of symbol.

Scale

